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U.S. Army Toxic and Hazardous Materials Agency

## Radon Monitoring in Army Stand-alone Housing Units

### Final Report

April 1990

prepared for

Commander  
U.S. Army Toxic and Hazardous Materials Agency  
Aberdeen Proving Ground, Maryland 21010-5401

prepared by

Environmental Research Division  
Argonne National Laboratory  
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<p>Argonne National Laboratory has completed screening measurements of indoor radon concentrations at 51 Army stand-alone housing areas located throughout the continental United States. The measurements were done in accord with the existing Army Radon Program. Quality assurance aspects of the project included the use of controls, spiked samples, and field replicates, as indicated by the Army Radon Program.</p> <p>In all, 1,117 alpha track detectors, manufactured by Tech/Ops Landauer of Glenwood, IL, were deployed in September 1989 in a total of 892 residential structures. The monitoring period was a nominal 90 days. A total of 818 detectors have been returned. Returned detectors, as well as controls and spikes, were analyzed by Tech/Ops Landauer.</p> <p>A total of 55 housing structures exhibited radon concentrations equal to or greater than 4.0 pCi/L (picocuries per liter), the level identified by the Army Radon Program above which follow-up measurements or mitigative actions are required. Housing units exceeding 4.0 pCi/L were in the following locations: Ansonia, Shelton, and Westport, Connecticut; Addison and Worth, Illinois; Burlington and Randolph, Massachusetts; Watertown, New York; Dorseyville, Elizabeth, Elrama, and Hermine, Pennsylvania; Newport News, Virginia; and Sun Prairie, Wisconsin.</p>						
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## **Radon Monitoring in Army Stand-alone Housing Units**

### **Summary**

Argonne National Laboratory (ANL) has completed screening measurements of indoor radon concentrations at 51 Army stand-alone housing properties located throughout the continental United States. Each of these housing properties has been identified for closure under the Defense Authorization Amendments and Base Closure and Realignment Act, Public Law 100-526.

Argonne conducted screening measurements in accordance with established Army policy regarding indoor radon monitoring and mitigation. Alpha track detectors (ATDs) were used for the measurements, which lasted a nominal 90 days. In all, 892 structures were monitored. These structures included single-story, single-family houses; single and multistory multiplexes; and multistory apartment buildings. Each individual family unit received at least one detector. In all, 1,117 detectors were deployed in September 1989. Of this total, 892 detectors have been returned, while 299 remain outstanding. Quality control included the deployment of 70 replicate pairs and the use of 50 detectors as controls and 50 as known standards or spikes. Spikes were developed by exposing the detectors to known radon concentrations at ANL's facilities. All analyses of placed, control, and spiked detectors were performed by Tech/Ops Landauer, Glenwood, Illinois, the manufacturer of the detectors. As an additional measure of quality control, 30 detectors were forwarded to the U.S. Environmental Protection Agency radiation laboratory in Denver for independent spiking.

In all, 55 housing units, located at 14 of the 51 monitored properties, displayed indoor radon concentrations equal to or greater than 4.0 pCi/L, the lowest action level identified in the Army Radon Program. An additional 56 units displayed radon concentrations between 3.2 and 4.0 pCi/L.

Those units at which radon concentrations exceeded 4.0 pCi/L were in the following locations: Ansonia, Shelton, and Westport, Connecticut; Addison and Worth, Illinois; Burlington and Randolph, Massachusetts; Watertown, New York; Dorseyville,

## 1 Introduction

In October 1988, Congress passed the Defense Authorization Amendments and Base Closure and Realignment Act, Public Law 100-526. This legislation provided the framework for making decisions regarding closures and realignments of military bases. In December 1988, the Defense Secretary's ad hoc Commission on Base Realignments and Closure issued its final report nominating candidate installations for closure or realignment. The Commission's recommendations, subsequently approved by Congress, affect 111 Army installations, of which 86 are to be closed. Among the installations marked for closure are 53 stand-alone military housing areas located throughout the continental United States.<sup>1</sup>

Legislative directives require that all base closures and realignments be performed in accord with applicable provisions of the National Environmental Policy Act (NEPA). As a result, NEPA documentation is being prepared for all housing properties scheduled for closure. The Base Closure Division of the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) is responsible for addressing all environmental issues associated with the affected properties, including indoor radon concentrations. Argonne National Laboratory (ANL) has previously completed enhanced preliminary assessments on all Army housing units scheduled for closure. However, because of the particular scheduling requirements of a reliable program for monitoring indoor radon concentrations, that aspect of the property assessments has been conducted on a schedule independent of other environmental assessment activities.

This document is a report of the screening measurements of average indoor radon concentrations conducted by ANL at Army stand-alone housing properties scheduled for closure. In some instances, the term "screening measurement" implies a three-day measurement with a charcoal detector. However, when used in the context of this report, "screening measurement" reflects the protocols defined in the Army Radon Program and refers to a nominal 90-day measurement with an alpha track detector. Additional discussions of the Army Radon Program are found in Section 3.

In all, 53 Army housing properties are scheduled for closure. However, two of the properties scheduled for closure have been removed from consideration under this study. At one of those properties, Clementon Army Housing, Clementon, New Jersey, the houses

are in disrepair, with broken windows or missing doors, precluding accurate measurement of indoor radon concentrations. Houses at the second property, Wherry Army Housing, St. Louis, Missouri, have only recently been screened for radon by Army personnel. The results of those screening measurements are being made available to USATHAMA, thus making additional radon screening under the Base Closure Program unnecessary at this time.

### **1.1 Authority**

The USATHAMA has engaged Argonne to support the Base Closure Program by assessing the environmental quality of the installations proposed for closure. Argonne has completed enhanced preliminary assessments of the properties. These assessments were conducted under the authority of the Defense Department's Installation Restoration Program (IRP); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Public Law 91-510, also known as Superfund; the Superfund Amendments and Reauthorization Act of 1986 (SARA), Public Law 99-499; and the Defense Authorization Amendments and Base Closure and Realignment Act of 1988, Public Law 100-526. The complete list of properties for which enhanced preliminary assessment reports have been published is found in Appendix A. The reader is referred to these individual reports for additional information on the subject properties.

Authority for the study of indoor radon concentrations is also established by the Base Closure and Realignment Act of 1988. This legislation specifies that all base closures and realignments be performed in accord with applicable provisions of the NEPA. The USATHAMA has interpreted this directive to mean that all activities or conditions associated with the property that have resulted or could result in adverse impacts to environmental quality or human health must be addressed. Included in such a broad category of consideration are indoor radon concentrations, which may represent increased health risks to occupants of the houses. Finally, irrespective of the Base Closure Program, indoor radon monitoring is required by existing Army policy as outlined in the Army Radon Program.

## 1.2 Study Objectives and the Army Radon Program

In performing assessments at Army housing unit properties scheduled for closure, USATHAMA will identify and characterize all significant environmental conditions that exist at the properties to ensure that appropriate steps are taken to mitigate or remediate any identified adverse impacts to human health or the environment. The enhanced preliminary assessments of these Army housing properties have identified and characterized all areas requiring additional environmental evaluation and identified conditions that should be further investigated or remediated. The additional investigations are being conducted as a separate task.

The objective of this study is to implement the initial radon screening measurement directive contained in the policy memorandum of April 25, 1988, concerning radon measurement and mitigation in Army-owned or -leased structures. The Army Radon Program<sup>2</sup> comprises a Radon Measurement Strategy and a Radon Mitigation Plan, which together meet the guidelines on radon measurement and mitigation issued by the United States Environmental Protection Agency (U.S. EPA).<sup>3-6</sup>

The purpose of the Army Radon Program, as outlined originally in the policy memorandum *DOD Radon Assessment and Mitigation Policy*,<sup>7</sup> is to identify structures both within and outside of the continental United States that are owned or leased by the Army (including Civil Works) and have indoor radon levels greater than 4 picocuries ( $4 \times 10^{-12}$  curies) per liter (pCi/L) of air. Structures having levels greater than 4 pCi/L will be modified so that radon levels are reduced to no more than 4 pCi/L. The Army Corps of Engineers (Civil Works) will adapt this program to its operations.

The Army Radon Program established three priority categories for the radon monitoring effort. Of highest priority are structures used as day-care centers, schools, hospitals, and residential areas. Of secondary priority are structures that are occupied on a 24-hour basis. All remaining permanent structures fall into the third priority category.

This ANL radon monitoring study has been designed to implement the first of three steps in the Army's radon measurement strategy, as outlined below:

- Each building will be screened initially for 90 days by using an alpha track detector located in the lowest accessible level or the basement. Initial screening will be performed when buildings are closed (during heating or cooling seasons) in order to obtain maximum radon concentrations.
- Buildings with an initial measurement exceeding 20 pCi/L will not be scheduled for long-term measurement, but the problem will be mitigated according to the schedule established in the Radon Mitigation Plan.
- Buildings having an initial measurement between 4 and 20 pCi/L will undergo long-term measurement for a period of 12 months. Two detectors will be used, one in the basement (when the structure contains a basement) and one in the lowest living area.

Actions taken under the Army Radon Mitigation Plan are based upon the highest radon concentration observed in the screening measurements. Anticipated mitigative actions are the following:

- Radon concentrations greater than 200 pCi/L will require immediate mitigative actions that may include building ventilation and/or sealing of cracks and other potential points of radon gas entry. If those actions do not reduce radon concentrations within one month, activities occurring within that structure will be relocated.
- Radon concentrations between 20 and 200 pCi/L will require that mitigative actions be implemented within six months.
- Radon concentrations between 8 and 20 pCi/L will require mitigative actions within 1-4 yr, depending on the levels measured.

- Radon concentrations between 4 and 8 pCi/L will require mitigative actions within 5 yr of the measurement.
- All buildings within which radon mitigative actions have been completed will be measured again for radon to assure the success of the actions.

These action levels are equivalent to action levels proposed by the U.S. EPA. It is important to note that action levels defined by both the Army and the U.S. EPA are based upon an annual average radon concentration. Furthermore, a monitoring period lasting less than one full year may introduce some intrinsic error to the estimate of annual average radon concentration. These errors are due primarily to seasonal variations in radon seepage from soils and, to a lesser extent, to the fact that the extent of natural ventilation of structures varies widely with season. Depending upon the time of year over which a short-term measurement is taken, this error may be either positive (representing a worst case condition) or negative.

The U.S. EPA has noted that 90-day measurements taken during a heating season in colder climates (or during a cooling season in warmer climates) may produce radon results that can be as much as two to four times the annual average.<sup>3,5</sup> Studies completed in 1989 showed that summer radon concentrations account for approximately 40% of the annual average and that winter concentrations can be as high as 1.7 times the annual average.<sup>8</sup> This difference is thought to represent not only seasonal variations in rates of radon diffusion from the earth, but also the unintended result of efforts toward energy-efficient house construction.

Despite these empirically observed seasonal variations, a measurement period lasting at least 90 days and occurring largely within a heating or cooling season is nevertheless believed to provide a reliable result that can be considered to be a worst case condition. Therefore, when the results obtained under such monitoring conditions are below levels of concern ( $< 4$  pCi/L), year-long follow-up measurements become unnecessary, and no further mitigative actions are needed. Taking these factors into consideration, the Army's policy requires that year-long radon follow-up measurements will be conducted in structures where screening measurement results between 4 and 20 pCi/L have been obtained. Only structures having one-year measurements greater than 4 pCi/L will undergo mitigation.

In addition to follow-up measurements, the mitigative actions suggested in the Army plan generally involve sealing cracks and breaks in the foundations of the structures, thereby reducing or eliminating the routes by which radon gas can enter the structure. Mitigation may also involve providing some sort of mechanical or natural ventilation to the structure (weather permitting) to reduce indoor radon concentrations by dilution of indoor air volumes with outdoor air.

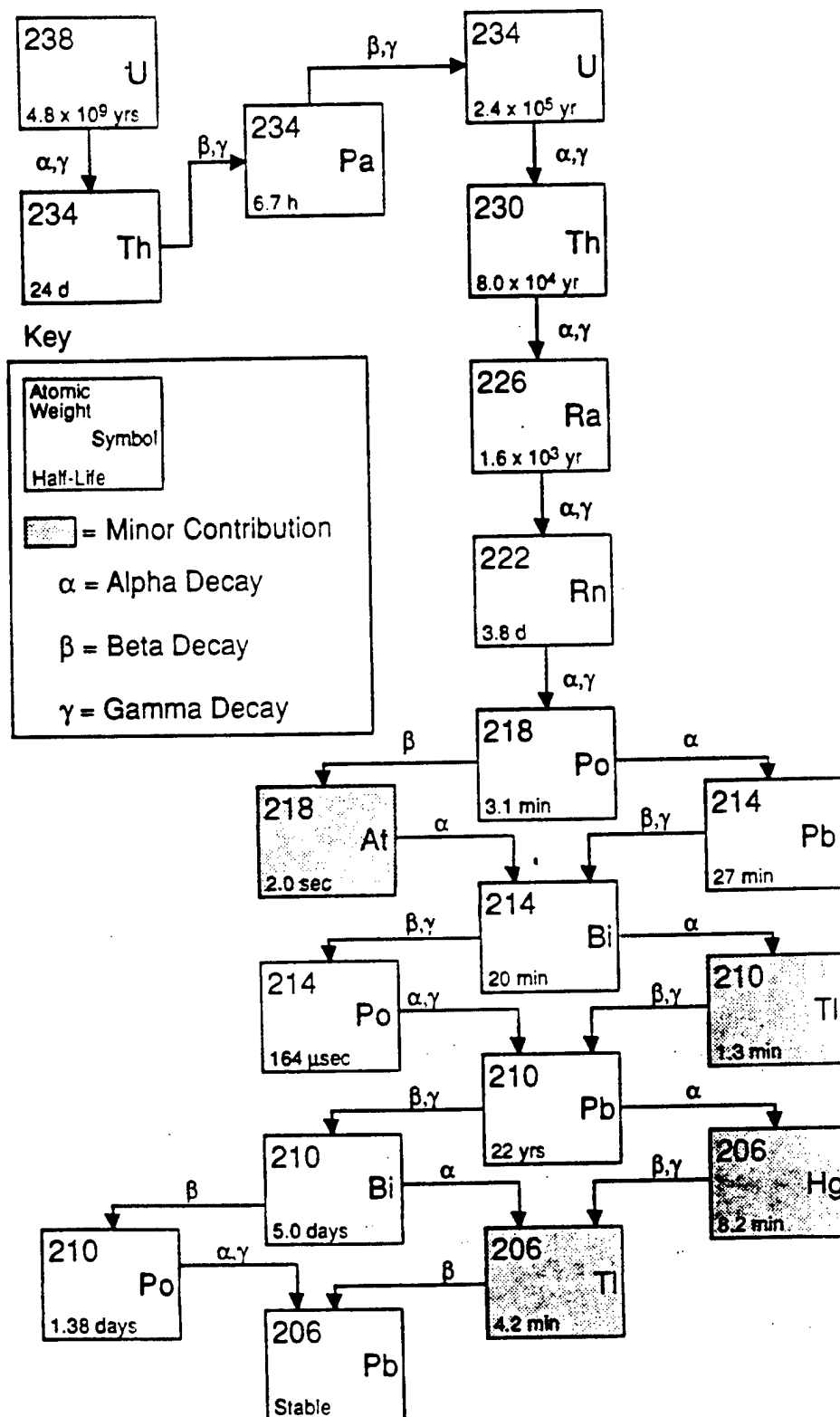
## 2 General Information

Concern over health risks from radon exposure has existed for over 30 years. Radon, its radioactive decay products, and its radioactive progenitors have all been extensively studied. The mechanisms of their generation and fate and the health risks resulting from exposure to these materials have been extensively documented in the scientific literature. The discussion that follows is not intended to provide a complete treatise on radon or the consequences of exposures to radon or its radioactive daughters. Instead, only a brief overview of fundamental issues surrounding radon is presented in order to establish a background from which the specific objectives and parameters of a radon monitoring study can be understood.

### 2.1 Sources and Properties of Radon

Radon is a colorless, odorless, tasteless gas. It is chemically inert and naturally occurring, resulting from the radioactive decay of uranium and thorium present in soils and rock. Because radon is both chemically inert and a gas under normal conditions of temperature and pressure, it moves freely once it is formed, diffusing through very small interstitial spaces in rocks and soils, dissolving in groundwater, and ultimately dispersing into the ambient air or into enclosed structures whose foundations are in contact with the earth's surface.

Uranium-238 ( $^{238}\text{U}$ ) and thorium-232 ( $^{232}\text{Th}$ ), both common, naturally occurring elements, together provide a constant source of radon gas. Radioactive decay is the process by which the nucleus of an unstable element undergoes spontaneous transformation through the release of particles and/or electromagnetic radiation (energy). The resulting element, called the radioactive daughter or progeny, may itself be unstable and undergo spontaneous transformations upon formation. The rate at which an unstable nucleus decays (its radioactivity) is measured in curies (Ci), with one curie equal to 37 billion disintegrations per second. Since the amount of radiation emitted is directly proportional to the amount of the radioactive element present, radiation levels are directly correlated to concentrations. The radioactive decay schemes for  $^{238}\text{U}$  and  $^{232}\text{Th}$  are displayed in Figs. 2.1 and 2.2, respectively.



**FIGURE 2.1 Radioactive Decay Scheme for Uranium-238 (Adapted from Reference 9)**

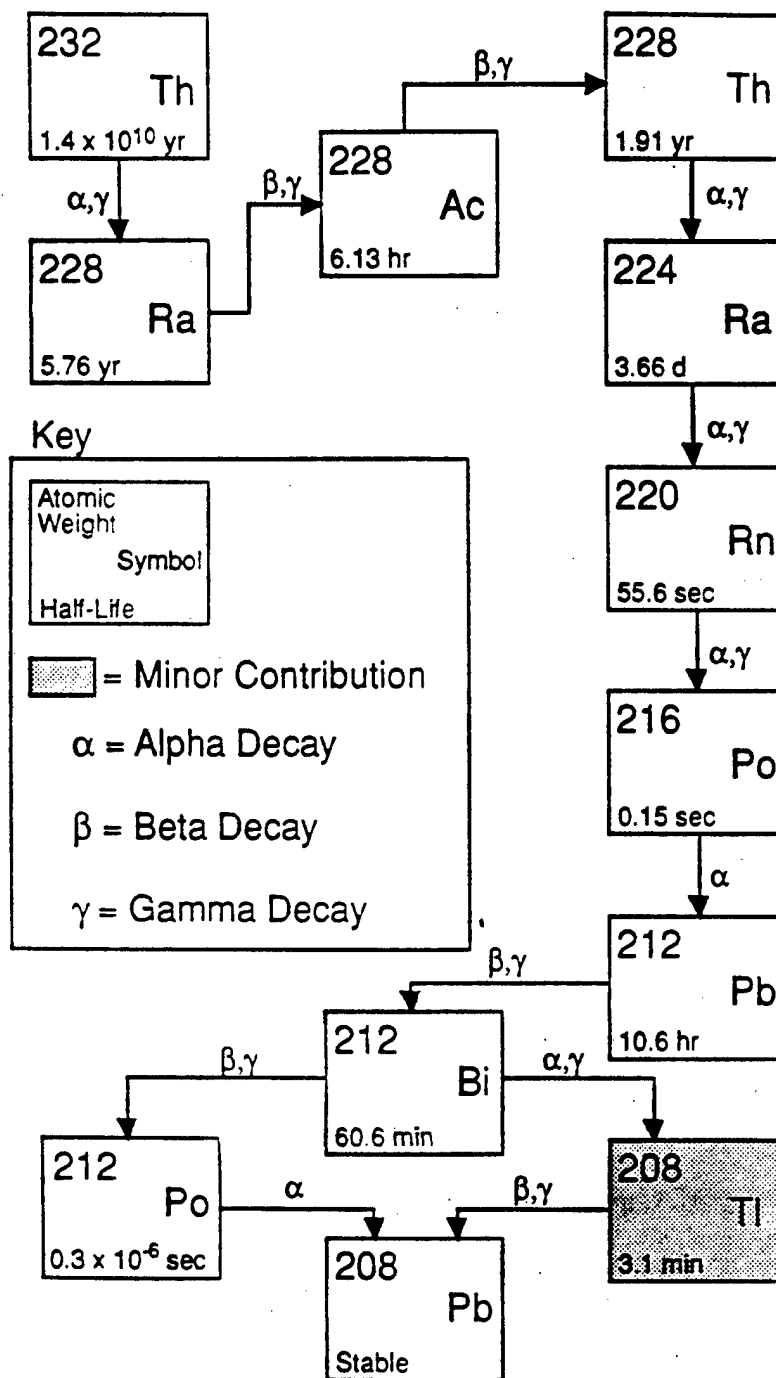


FIGURE 2.2 Radioactive Decay Scheme for Thorium-232 (Adapted from Reference 9)

Also shown in Figs. 2.1 and 2.2 are the half-lives of the elements in the decay schemes. The half-life, defined as the time required for one-half of the radioactive nuclei present to undergo radioactive decay, is of particular importance in determining the magnitude of risks from exposures to radon and its radioactive daughters. Uranium and thorium decay to two different isotopes of radon,  $^{222}\text{Rn}$  and  $^{220}\text{Rn}$ . (Elemental isotopes are atoms that differ only in atomic mass, because different numbers of neutrons are in the nuclei.) Radon-222, a progeny of  $^{238}\text{U}$  decay, is the isotope about which concern is greatest. This concern derives primarily because the half-life of  $^{222}\text{Rn}$ , 3.8 days, is sufficiently long to allow significant quantities of  $^{222}\text{Rn}$  to diffuse from the earth into buildings where it can be inhaled. By comparison, the half-life of  $^{220}\text{Rn}$  is only 55.6 seconds. Except for its markedly reduced potential for reaching and accumulating in indoor air spaces,  $^{220}\text{Rn}$  presents health risks equivalent to  $^{222}\text{Rn}$ . For simplicity, further discussions of radon will make no distinction of isotopes.

Radon is itself radioactive and undergoes spontaneous decay through the release of alpha and gamma radiation. However, in contrast to radon, the radioactive daughters thus formed (see Figs. 2.1 and 2.2) exhibit some chemical reactivity. Most will be adsorbed electrostatically onto interior building surfaces and furniture. Some, however, will attach to dust particles and remain airborne for long periods of time, thus increasing inhalation potential. The total health risk, therefore, is the result not only of radon presence, but also of the presence of respirable radon daughter products.

Relative to some other forms of radiation such as gamma or X-ray, alpha radiation produces minimal biological damage from external exposures. Internal exposures to alpha radiation, however, have been shown to produce significantly greater damage to tissues. The internal exposures to alpha radiation resulting from inhalation of radioactive radon daughters (adsorbed onto airborne dust particles) constitute the major health risks. Inhalation of gaseous radon represents an additional health risk.

## **2.2 General Considerations for Indoor Radon Measurements**

Screening measurements of indoor radon concentrations should approximate the highest radon concentrations to which a building's occupants will be exposed. To ensure

that this fundamental objective is met, a screening measurement study generally has the following characteristics:

- Measurements should be taken in the lowest level of the building that is likely to be occupied for extended periods of time. In some instances, basement radon concentrations can be as much as four times those at higher levels in the structure. Therefore, all basements except those with earthen floors or walls are considered by the Army to be the lowest living area (even if they are not currently being used in that way) and should be monitored. Where basements do not meet the definition of lowest living area, the next lowest occupied level should be used.
- Ideally, measurements should be made under "closed-house" conditions. To establish a true closed-house condition is virtually impossible in a practical sense, unless the building is unoccupied during the measurement period. A close approximation to closed-house conditions results when the measurement is conducted during periods when artificial air conditioning (heating or cooling) is expected to be operative and natural ventilation of the structure is minimal (i.e., doors and windows are likely to be kept shut, and internal-external air exchange systems such as attic fans are inoperative). Air conditioning systems (both heating and cooling) that recirculate internal air can be operated, however, without detracting from closed-house conditions.
- Depending on the instrumentation used, measurement periods can vary from one day to one year. Although past studies have established both diurnal and annual variations in radon diffusion rates, most instrumentation has been calibrated so that its use over its recommended time period results in a reliable screening level that can serve as a basis for decisions regarding appropriate or necessary mitigative actions.
- In addition to being in the lowest living area, the monitor should be placed away from drafts, ventilation ducts, windows, fireplaces, or other areas where artificial convection currents and/or high humidity are present (e.g., in kitchens and bathrooms). In addition, monitoring

instruments should not be placed on or near floors or outside walls where convection air currents are strongest.

### 2.3 Selection of Radon Monitoring Instrumentation

A number of different instruments are currently available for radon screening measurements. The U.S. EPA has developed guidelines for the following seven radon measurement devices:

- Continuous radon monitor (CRM)
- Alpha track detector (ATD)
- Electret ion chamber (EIC)
- Charcoal canister
- Charcoal liquid scintillation device (CLS)
- Evacuated scintillation cell
- Pump/collapsible bag device
- Grab sampling

The reader is referred to U.S. EPA's *Interim Protocols For Screening and Follow-Up Radon and Radon Decay Product Measurements*<sup>5</sup> for information on the exact operating mechanisms of each of these instruments and a comparison of their strengths and weaknesses. In general, all of the above instruments are designed to determine radon concentrations by measuring radiations resulting from the radioactive decay of radon and/or its daughter products. Most devices collect radon in a sensitive volume and then measure the radiation from that radon and also from its daughters produced within the sensitive volume. The CRM, ATD, EIC, and scintillation cell devices respond to alpha radiation from  $^{222}\text{Rn}$ ,  $^{218}\text{Po}$ , and  $^{214}\text{Po}$  or from  $^{220}\text{Rn}$ ,  $^{216}\text{Po}$ , and  $^{212}\text{Po}$ . However, none of the instruments can differentiate the sources of alpha radiation impinging on its detectors. Thus, these instruments can, in theory, measure alpha radiation from any alpha source. In practice, however, only those radioactive species with sufficient mobility and half-lives to reach the instrument's detector will be measured. The alpha radiation measured, therefore, derives primarily from the  $^{222}\text{Rn}$  decay chain, and the majority of the total alpha radiation

derives from decays of the daughter products that are formed in situ (i.e., on or near the instrument's detector) or that are carried to the detector adsorbed on airborne dust particles.

The charcoal canister and the CLS devices respond to beta and/or gamma radiation from the isotopes of Pb and Bi in the decay chains. The ambient radon is adsorbed on the charcoal, and the daughters produced in situ are subsequently measured. In order to discriminate between radon and daughter products that have already been formed and are present in ambient air, most instruments precede the radiation detection device with a particulate filter that is intended to eliminate the contributions from these airborne radioactive particulates.

The U.S. EPA has not specifically endorsed any particular type of radon measurement device. Instead, it has developed protocols for the use of each of the above instruments. In so doing, the U.S. EPA has indicated that any of these instruments is capable of providing reliable screening measurement results if it is used in accord with the applicable protocol. The U.S. EPA acknowledges, however, that the uncertainties of results will vary between instruments.

The selection of any of the above devices for screening measurements depends not only on such factors as the instrument's accuracy and precision and the reproducibility of results, but also on such practical parameters as cost; availability; ease of use; duration of sample collection; interferences; and the speed, accuracy, and cost of analysis.

Aside from the above instruments, other types of monitors take a fundamentally different approach in determining radon concentrations. Chief among these instruments is the radon progeny integrated sampling unit (RPISU). This is an active, rather than passive, monitor. It actively collects known volumes of indoor air and does not rely on natural air convection in equilibrium conditions to deliver radon molecules to the sampling detector. The RPISU is also unique because it measures radiation only from the radioactive daughters of radon collected on a filter. This gives the instrument inherently greater accuracy of measurement. The widespread use of such an instrument, however, is not practical because of its high cost and also because its proper use requires a skilled operator. The RPISU is, however, an attractive option for follow-up measurements not only because of its accuracy, but also because a representative sample can be gathered in as little as 100 hr of continuous operation. Furthermore, over such a short time period, establishing

and maintaining closed-house conditions is not overly burdensome for the structure's occupants.

Continuous radon monitors and continuous working-level monitors can also be used for screening or follow-up measurements. Continuous working-level monitors offer a particular advantage in that, with the appropriate detector, the monitor can measure all or some of the radon daughters adsorbed onto airborne, respirable dust particles. As with the RPISU, however, cost argues against widespread use of these monitors. However, drawing indoor air continuously and actively into the sampling detector allows shortening of the period necessary for representative sampling, making these monitors suited for follow-up measurements done, preferably, under closed-house conditions. In addition, measurements can be made in time intervals as small as 1 hr and stored for later processing, thus allowing variations in radon and radon daughter concentrations with time to be precisely determined.

### **3 Study Design and Sampling and Analysis Protocols**

#### **3.1 General Characteristics of the Monitoring Program**

As noted earlier, this monitoring program is intended to satisfy the requirements of screening measurement strategies in the Army Radon Monitoring Program. Therefore, the following fundamental parameters of this monitoring program were established at the onset:

- Alpha track detectors (ATDs) will be used. Since ATDs have been used extensively in other Army radon monitoring efforts, the results from this study can be compared directly with those other results. Such comparisons are essential to support priority decisions in implementing mitigative actions throughout the Army's properties.
- Alpha track detectors will be purchased from Tech/Ops Landauer, Inc., the vendor supplying detectors for other Army radon monitoring activities. Using detectors from the same supplier and assuming some regularity in production eliminates concerns about differing detector sensitivity and responsiveness and makes results from this study directly comparable to results obtained in other Army radon monitoring efforts.
- Detectors will be placed in the lowest inhabitable level of each structure (i.e., basements, if those areas contain or could contain finished living spaces).
- Each individual housing structure (a first-priority structure as defined in the Army Radon Monitoring Program) will receive a detector.
- For multiunit structures, each individual unit will receive a detector.
- The monitoring will be continuous for a minimum of 90 days.

- To the extent that the schedule for base closures allows, monitoring will extend over a period when closed-house conditions can be expected to exist, preferably during the winter months.
- Controls, "spikes," and field replicate samples will be used for quality control.
- The results and further actions recommended will be compatible with the action levels and directives contained in the Army Radon Program.

Additional program parameters and logistic decisions were selected by ANL in collaboration with USATHAMA and representatives from the United States Army Environmental Hygiene Agency (USAEHA). These program decisions and logistic arrangements are discussed in the following sections.

### **3.2 Quality Control Procedures**

Quality control activities include the use of controls, field replicates, and known standards ("spikes"). In general, known standards are useful in determining the accuracy of detector analyses, controls provide insight into possible extraneous sources of alpha radiation encountered by the detector during storage or transport to the analytical laboratory, and field replicates provide some measure of the precision of both the detector's responsiveness and the analytical service. Additional actions were taken to ensure the randomness of monitor distribution. Each of these activities is discussed more completely below.

#### **Controls**

An additional 50 monitors were randomly selected to serve as controls. These monitors were removed from their foil envelopes and immediately sealed. At least five such controls were randomly included in each batch of monitors shipped for analysis. (See Table 3.1 for characteristics of batches of detectors sent to Tech/Ops Landauer for analyses.) Fictitious dates were added to the control detectors to make them indistinguishable from placed detectors.

TABLE 3.1 Characteristics of Detector Batches Delivered for Analysis

Batch No.	Detectors Sent	Delivery Date	No. of Controls	No. of Spikes	Analytical Process Nos.
1	414	01/26/90	15	15	A06675, A06685
2	347	01/30/90	15	15	A06712, A06719
3	89	02/21/90	5	5	A06967
4	49	03/08/90	5	6	A07161, A07182
5	38	03/21/90	5	5	A07358

### Field Replicates

Standard random number tables were used by field personnel to select locations where field replicates would be deployed. Each field team was assigned a single-digit number. When that number matched the last digit of the next random number in the table, the current location was given a second monitor, which was placed immediately beside the first monitor. This method of selection guaranteed that field replicates would be placed in at least 10% of the housing units sampled.

### Known Standards (Spikes)

Fifty monitors were selected at random from the initial inventory to serve as known standards or spikes. A description of the procedures used to develop these spikes appears in Section 3.6.

As an additional quality control check, 30 unopened detectors (3% of the total number sampled) were selected randomly from the initial detector inventory and delivered to Vail Research and Technology Corporation, Alexandria, Virginia, the quality control contractor for Army radon monitoring activities. These detectors were then forwarded to the U.S. EPA's Radiation Laboratory for independent spiking. These 30 detectors were spiked to different levels of exposure by varying the time spent in the radon chamber. Irrespective of duration, however, the U.S. EPA spiking was done in a manner identical to the methodology described in Section 3.6. After spiking, the detectors and their calculated exposures were returned to ANL for random incorporation with placed detectors and

delivery to Tech/Ops Landauer for analyses. At the time of this report's publication, analytical results for these 30 detectors were not yet available.

### **Randomness**

Steps were taken to ensure randomness throughout the monitoring program. Before deployment, the initial inventory of monitors was mixed so that a numerical sequence of detectors or a correlation between detector numbers and properties could not be established. Detectors selected to serve as controls or spikes were also selected randomly from the total inventory before deployment. The ANL field teams further mixed all monitors assigned to them before deployment. Random number tables were used by the field teams to select units receiving field replicate detectors. Returned detectors were batched before delivery for analyses. Each batch contained representative monitors from each property surveyed. (Later batches submitted, where all or most of the detectors from a given property had already been submitted, did not necessarily represent the complete array of properties.) In addition, each batch contained at least five spiked detectors and at least five controls. Fictitious start and end dates were added for the spikes and controls to make them indistinguishable from other detectors.

### **3.3 Detector Deployment**

Four two-person teams of ANL investigators deployed detectors in each house being monitored. Deployment occurred during the period September 5-15, 1989. Prior to detector deployment, USATHAMA distributed a radon fact sheet and sample information letter to all affected Directorates of Engineering and Housing (DEH) offices. (DEH offices are responsible for general maintenance of stand-alone housing areas located within their geographic areas of control.) The DEH offices were asked to distribute the fact sheet and information letter to all individuals occupying houses scheduled for monitoring. Additional copies of the fact sheet were distributed to house occupants by ANL investigators upon request. A copy of the informational materials distributed by USATHAMA is found in Appendix B.

The following protocols were established for radon detector deployment:

- Whenever possible, DEH personnel accompanied ANL investigators during initial detector deployment. The DEH presence was essential for access to unoccupied houses.
- A field data sheet was completed for each detector deployed. Appendix C contains a copy of that field data sheet.
- Along with the detector, ANL investigators left a stamped, self-addressed ANL mailing envelope, a gold foil seal with which to seal the detector at the end of the monitoring period, and printed instructions for returning the detector to ANL. A copy of the instruction sheet for returning detectors is included in Appendix D.
- Ideally, ANL investigators personally contacted house occupants, explained the program as necessary, deployed the detector, and left supporting materials for the detector's eventual return to ANL. However, when the occupants were not at home or the house was unoccupied, the following modifications to this procedure were established. At the ANL investigator's discretion, after the third unsuccessful attempt to find the house occupant at home, the investigator may have chosen to leave a detector and other related materials with a neighbor who had agreed to deliver the detector to the house occupant upon his/her return. Alternatively, the detector and materials would have been left with representatives of the appropriate DEH for later deployment. These alternatives were followed for unoccupied houses in instances where DEH personnel did not accompany ANL personnel during initial deployment. When DEH personnel were present, they provided access to vacant houses so that ANL investigators could deploy the detectors.

A number of different house styles are represented in the 51 properties monitored. "Capehart" or "MCA" houses are found at 47 of the 51 properties. In most instances, those properties are composed exclusively of Capehart or MCA houses, although at some properties both Capehart and MCA are found. Capehart and MCA houses are very similar

in design and size. Both are one-story wood frame construction atop a poured concrete slab. Both contain approximately 1300-1600 ft<sup>2</sup> of finished living space. In these houses, detectors were preferably placed on dressers in master bedrooms. Alternatively, some detectors were placed in living rooms. When a house was unoccupied, the detector was placed on a kitchen counter to keep it off the foundation. (Since the kitchen was not in use, placement of the detector in this room was acceptable.) Field replicate samples were placed beside each other.

The remaining four properties contain multiplexes or apartment buildings. Multiplex houses are of two-story, wood frame construction. Those at one property have brick veneers. Although some of these structures have basements, none of the basements contain finished living space. In these houses, detectors were placed preferably on dressers in bedrooms located on the ground floor. No detectors were placed in the upper levels of the multilevel structures. Except for field replicates, each individual unit received only one detector. One property, Manhattan Beach Army Housing, Brooklyn, New York, contained full masonry (brick) apartment buildings. As with the multiplex structures, each individual unit received one detector, placed in ground floor bedrooms or living rooms. Again, except for field replicate samples, each unit received only one detector. No detectors were placed in upper levels of the apartment buildings. Field replicate detectors were always placed side by side.

The columns for remarks found in the tables in Appendixes E and F provide information on the style of house and placement of each detector.

### **3.4 Detector Recovery**

As indicated above, the monitoring program originally provided for the individual house occupant to seal the detector at the end of the 90-day monitoring period, add the ending date to the detector label, and return the detector to ANL in the stamped, self-addressed envelope provided. For unoccupied houses, appropriate DEH officials agreed to retrieve the detectors and forward them to ANL. In the majority of instances, this

procedure was followed. However, when detectors did not return within the anticipated period, ANL used one or more of the following methods for retrieving the detectors:

- Direct contact with the house occupant
- Contact with the housing property's senior occupant, soliciting his/her assistance in reminding house occupants to return delinquent detectors
- Contact with the respective DEH office, soliciting its assistance in retrieving delinquent detectors, especially those deployed in unoccupied houses
- Providing a list of outstanding detectors to the ANL subcontractor currently performing environmental testing and investigations at the housing properties, soliciting his/her assistance in reminding occupants with delinquent detectors to return them to ANL

Despite ANL's efforts to retrieve delinquent detectors and the assistance provided by USATHAMA, a number are still outstanding as this report is written. Detectors deployed by ANL but not returned for analysis are identified as "not returned [NR]." Detectors left with DEH personnel for deployment in unoccupied houses but not returned for analysis are identified as "no data [ND]." Although a number of detectors are still outstanding, this report is being issued as a final report. Efforts to retrieve outstanding detectors are continuing. When the outstanding detectors are finally received and analyzed, tabulated data will be revised and delivered to USATHAMA as addenda to this report. Allowing detectors to continue operating beyond the nominal 90-day monitoring period will not invalidate data. If anything, data will exhibit a more accurate approximation of the annualized radon concentration. However, these data are needed as soon as possible to allow any necessary mitigation actions at those locations to proceed on a schedule compatible with the overall base closure schedule.

### **3.5 Circumstantial Monitoring Information**

Appendix E provides information regarding the circumstances under which each detector was exposed. Information is arranged alphabetically by state, then again

alphabetically by property name within each state. For each detector deployed, the following information is displayed: house address, unit number (the same as the house address for single-family structures), the occupant (at the start of the monitoring period), the start and end dates of the monitoring period (as read from the detector label), the date the detector was received back at ANL after the monitoring period ended, and the date the detector was sent for analysis. In addition, a column for remarks displays unusual or abnormal circumstances associated with each detector and additional, more specific information on the type of structure and placement within each house. Abnormal circumstances noted among remarks include detectors received without start or end dates or without the foil seal properly affixed. Section 4.6 provides additional information about development of circumstantial data and assumptions applied to the data base.

### 3.6 Calibration of Spiked Sample Detectors

Fifty detectors were randomly selected from the initial detector inventory to serve as spiked samples. These detectors were subjected to a known radon concentration for an exact period of time, thus allowing the calculation of total radon exposure. Fictitious dates were applied to these detectors, and some of them were randomly intermixed with each batch of detectors delivered to the analytical laboratory for analysis. Analytical results (and their standard deviations) for the spiked detectors are tabulated in Section 4.

The specific procedure by which the spiked detectors were generated is outlined in the steps below:

- A standard glove box, made of molded plastic and with an internal volume of 8.10 ft<sup>3</sup>, was converted for use as a steady-state radon chamber. Supporting equipment is shown schematically in Fig. 3.1.
- Room air is drawn through a diaphragm-and-piston air pump (K.N.F. Neuberger, Inc., Princeton, New Jersey) with a rated maximum flow rate of 50 L/min.
- Room air is then pumped through a calcium sulfate drying tube to remove excess moisture.

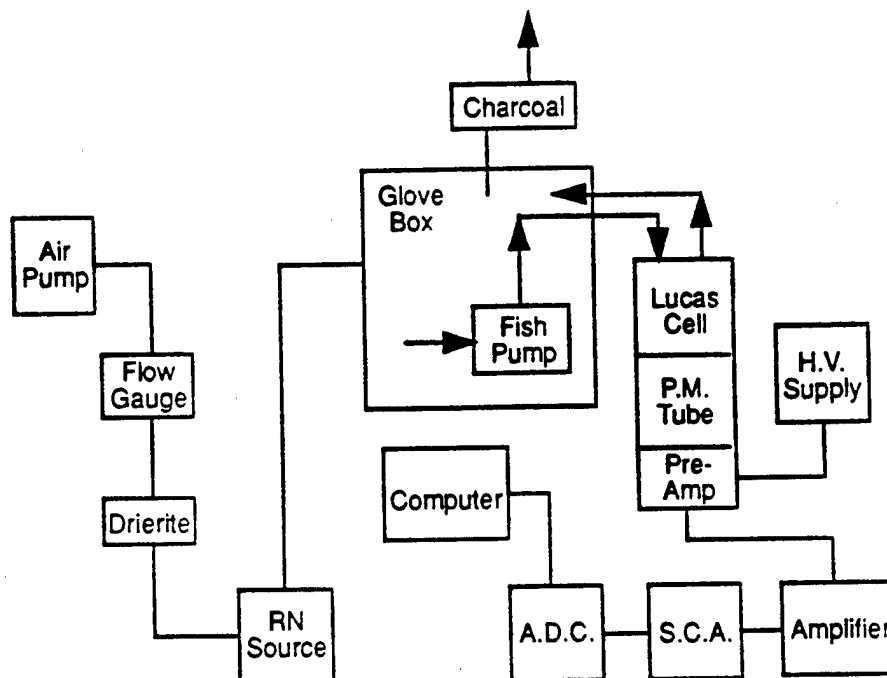


FIGURE 3.1 Schematic Diagram of Argonne's Radon Spiking Chamber

- Dried room air is passed through a standard radon source (Model RN-1025, Pylon Electronic Development Co., Ltd., Ottawa, Ontario, Canada). Radon-222 produced by decay of  $^{226}\text{Ra}$  enclosed in the radon source was entrained in the air stream being delivered to the glove box.
- A small pump located inside the glove box (Model Whisper 400, Second Nature Co., Fort Lee, New Jersey) operating at 0.8 L/min, circulates the radon-enriched air inside the glove box and delivers an equilibrated air stream to a standard scintillation counter (a Lucas cell). After passing through the Lucas cell, the air stream is returned to the glove box to maintain a steady-state radon concentration. To maintain steady-state pressures within the glove box, the box is vented to the atmosphere through a charcoal filter.
- The glass and quartz Lucas cell contains a thin film of zinc sulfide. The input to the cell is equipped with a 0.8- $\mu\text{m}$  micropore filter that removes any solid radon daughters from the air stream. Alpha

radiation from radon decay impinges upon the zinc sulfide. The resulting scintillation is measured by a photomultiplier tube that converts scintillation light pulses to current pulses by means of a photo cathode.<sup>10</sup>

- Current pulses are amplified and delivered to a single-channel analyzer, where they are converted to pulses of fixed height and width.
- A data acquisition and control interface module (Model STA-U, MetraByte Corporation, Taunton, Massachusetts) converts the fixed current pulse into digital data, which are then delivered to a Hewlett Packard Vectra CS computer. Data are stored as a pulse rate proportional to radon concentration. The pulses are stored and accumulated at 60-min intervals, resulting in computation of hourly count rates over the entire period of exposure, 96 hr.
- Random grab samples were taken during the four-day exposure to check the radon concentration. A calibration factor was established by using methodologies established by Rundo et al.<sup>11</sup> The calibration factor is determined by dividing the average flow in counts per minute (cpm) by the radon concentration (pCi/L): The calibration factor for this system was calculated at  $0.62 \pm 0.01$  cpm/pCi/L.
- By applying the calibration factor, the average radon concentration within the glove box over the four-day exposure period was calculated at  $257.64 \pm 23.70$  pCi/L, resulting in a four-day calculated exposure of  $1030.56 \pm 94.81$  (pCi/L) days.
- Air flows were adjusted to maintain a slight positive pressure within the glove box. After an 8-hr equilibration period, 50 detectors were introduced and placed in a tight cluster on the floor of the glove box, well away from corners or walls. Exposures continued at steady-state conditions for 96 hr (11:25 a.m. on 12/11/89 through 11:25 a.m. on 12/15/89).

- After exposures, the 50 detectors were allowed to remain unsealed in the room air to allow reequilibration with room conditions, and then gold foil seals were applied. Fictitious dates were added to the labels to make these detectors indistinguishable from other detectors.

### **3.7 Quality Control Aspects of Detector Analyses**

The analytical laboratory responsible for analyses of the radon detectors used in this study has established its own analytical procedures and quality control protocols for alpha track detector production, calibration, and analysis. The quality control protocols applicable to detector analysis are contained in Chapter V of the procedures manual developed by Tech/Ops Landauer.<sup>12</sup> The important analytical quality controls practiced by Tech/Ops Landauer are summarized below:

- Primary calibrations of radon monitoring systems are checked at least three times per year, with instruments whose calibrations can be related to the National Institute of Standards and Technology. Primary calibrations will be changed only when two consecutive checks reveal a shift of more than 15% at the 95% confidence level or one check reveals a shift of 25% at the 95% confidence level.
- Samples of alpha track detectors from each manufacturing batch are subjected to secondary calibration.
- Ancillary electronic equipment and temperature gauges are checked monthly.
- All detectors revealing radon concentrations greater than 20 pCi/L are reevaluated prior to the reporting of results. These reevaluations are performed by a different analyst using a different analytical machine.
- Reevaluations are performed on a random 10% of the detectors in each analytical processing group. Agreement of two evaluations results when both readings are within the range predicted by the Poisson distribution plus 5% at the 95% confidence level.

### **3.8 Special Case: Patrick Henry Army Housing, Newport News, Virginia**

It was discovered at the time of initial detector deployment that the houses at the Patrick Henry Army Housing property had already been monitored for radon. That monitoring effort was undertaken by DEH personnel from Fort Eustis under Army directives completely independent of the Base Closure Program. It was decided, nevertheless, to deploy ANL detectors as initially planned. Arrangements were made for Fort Eustis personnel to assist in the recovery of the monitors if necessary.

It was later learned that Fort Eustis personnel recovered five detectors placed by ANL. Instead of being returned to ANL, however, those detectors were submitted to Tech/Ops Landauer for analyses along with detectors placed by Fort Eustis personnel at other locations. Reported results for both Fort Eustis and the five ANL detectors were later forwarded to ANL by Fort Eustis personnel. The ANL field data sheets left with ANL detectors were completed by Fort Eustis personnel and also forwarded to ANL. These materials appear in Appendix G. [Note: only the one data sheet (#10) containing results for ANL detectors is included.]

Conversations with the Fort Eustis personnel responsible for the radon monitoring revealed that the ANL detectors retrieved accidentally from Patrick Henry housing received appropriate treatment and handling and that nothing that had occurred would have invalidated the analytical results for those detectors. Therefore, results for the five detectors retrieved by Fort Eustis personnel have been incorporated into the data base without amendment. However, standard deviations for these detectors are not reported.

## **4 Results and Discussion**

### **4.1 Reported Results**

Detectors returned to ANL were delivered in five batches to Tech/Ops Landauer for analyses. Controls and spikes were added to each batch. The composition of these batches and the corresponding processing batch numbers assigned by Tech/Ops Landauer are listed in Table 3.1. Whenever possible, each batch contained no more than one-third of all detectors from a given property and represented the full array of properties being studied.

Analytical results as reported by Tech/Ops Landauer appear in Appendix H. The standard deviations reported are associated with the measured exposures and represent errors in counting tracks made on the detector surface by alpha radiation.

### **4.2 Results for Controls and Spikes**

All of the original 50 detectors spiked by ANL have been analyzed. The analytical results for spikes have been identified in the Tech/Ops Landauer reports and are tabulated separately in Table 4.1. All 50 detectors originally reserved as controls have been analyzed. In all cases, the measured exposure was at the detection limit of an integrated exposure level of 30 (pCi/L) days.

### **4.3 Results for Placed Detectors**

Radon concentrations for the single-family houses and for the units or apartments are tabulated in Appendix F. These tables are arranged alphabetically by state and, within each state, alphabetically by property and additionally by street address. Thus, the order of entries for each property is identical with the display of circumstantial information for that property found in Appendix E. The columns containing remarks for each property in Appendix E are identical with the remarks columns for those properties in Appendix F. Summary information reported in the Appendix F tables is property specific.

TABLE 4.1 Analytical Values for Spiked Radon Detectors [Calculated Exposure:  $1030.56 \pm 94.81$  (pCi/L) days (at two sigma error)]<sup>a</sup>

Detector No.	Measured Exposure	Standard Deviation (%)	Tech/Ops Analytical Process No.	Detector No.	Measured Exposure	Standard Deviation (%)	Tech/Ops Analytical Process No.
1642289	1040.7	4.1	A06719	1645905	953.4	4.3	A07161
1642291	1044.7	4.1	A07161	1645907	1041.3	4.3	A06967
1642293	1005.0	4.3	A06967	1645909	863.7	4.5	A06719
1642294	1102.0	4.0	A06712	1645912	1120.6	4.0	A06967
1642296	1051.2	4.1	A06685	1645913	1074.0	4.0	A06712
1642297	1060.0	4.0	A06712	1645914	1000.9	4.2	A07161
1642303	1034.8	4.2	A06967	1645915	1054.7	4.0	A06712
1642306	1014.4	4.1	A06719	1645916	1079.2	4.0	A06685
1642310	1116.0	3.9	A06685	1645917	1007.4	4.1	A06712
1643414	1119.5	3.9	A06685	1645921	1058.2	4.0	A06685
1643415	1061.7	4.0	A06719	1645924	945.7	4.3	A07358
1643416	1079.6	4.1	A06675	1645927	946.0	4.3	A07161
1643425	984.6	4.2	A06712	1646026	1023.2	4.1	A06712
1643426	1023.3	4.1	A07358	1646027	1090.7	4.1	A06675
1643427	1074.0	4.0	A06719	1646028	1038.9	4.1	A06685
1643430	1121.3	3.9	A06685	1646029	1063.5	4.0	A06712
1643432	1109.4	4.1	A06967	1646033	873.4	4.5	A07358
1643434	1100.3	4.1	A06685	1646034	991.6	4.2	A06719
1643442	1005.6	4.1	A06685	1646039	1051.6	4.2	A06675
1643449	1016.1	4.2	A07358	1646040	1070.5	4.0	A06685
1644096	1096.8	4.0	A06719	1646041	954.7	4.3	A07358
1645421	1035.4	4.1	A06712	1648283	997.2	4.2	A07161
1645433	1079.2	4.0	A06719				
1645436	1095.0	4.0	A06685				
1645437	1024.9	4.1	A06685				
1645897	1003.9	4.1	A06712				
1645901	1028.4	4.1	A06712				
1645903	1044.2	4.1	A06719				

<sup>a</sup>Summary:

Average of Tech/Ops Landauer analyses:  $1040.0 \pm 114.6$  (pCi/L) days (at two sigma error)

Maximum measured value: 1121.3 (pCi/L) days

Minimum measured value: 863.7 (pCi/L) days

The results obtained for each structure or unit are graphically displayed in Appendix I. Property site plans are arranged in alphabetic order by state, then by property name. For each house or unit, the seven-digit serial number for the detector is displayed. The number appearing in brackets behind the serial number is the radon concentration expressed in pCi/L.

#### **4.4 Assumptions and Irregularities**

- When the detectors were not initially deployed by ANL field teams but were placed by the house occupant or a DEH representative, start dates were sometimes missing from the detector labels. Start dates indicated on the field data sheets completed by the house occupants or DEH personnel and returned with the detectors were inserted into the data base. In cases where a start date was not included in the data sheet or data sheets were not returned, a start date was added that coincided with the start dates for other monitors at the property. In all such cases, a comment was added to the remarks column to indicate that the sampling duration was estimated. In addition, detectors deployed by the house occupant or a DEH representative were identified in the remarks field.
- When a detector was returned to ANL without an end date indicated on the label, an end date was inserted that corresponded to the received date minus three days (the assumed first-class mail delivery time). All such cases were marked with a comment in the remarks field to indicate that the sampling duration was estimated.
- A number of detectors were returned without the seal properly affixed. In most instances, however, the detector was returned in its original foil pouch. A seal was affixed when the detector was again in ANL's possession. These detectors are identified by a comment in the remarks field.
- Eighteen "orphan" detectors remain. These are detectors for which some unreconciled discrepancy in supporting documentation prevents

assignment to a specific housing unit. These detectors were nonetheless analyzed. The results are given in Table 4.2. Except in one instance, none of these detectors shows a radon concentration above the action level of 4 pCi/L.

- Because some house occupants moved, a number of detectors were returned before the nominal 90-day monitoring period was completed. Although results from monitoring periods less than 90 days may not be representative of annual averages, the results are nevertheless valid representations of radon concentrations during the monitoring period.

TABLE 4.2 Results for Orphan Detectors

Detector No.	Exposure [(pCi/L) days]	Concentration (pCi/L)	Standard Deviation (%)
1436022	122.1	NDR <sup>a</sup>	NR <sup>b</sup>
1436062	120.3	NDR	NR
1436070	90.5	NDR	NR
1642326	111.8	1.1	11.7
1643679	276.6	3.0	7.7
1644322	183.7	NDR	9.4
1645789	187.2	NDR	9.3
1645803	267.8	1.9	7.9
1646460	30.0	0.7	NR
1648244	522.4	3.5	5.9
1646448	179.6	2.0	9.8
1645791	583.9	6.3	5.6
1642321	97.6	1.7	12.8
1645812	116.2	NDR	11.9
1643692	62.2	0.7	15.4
1645796	118.1	1.2	11.8
1647551	97.6	1.1	12.8
1643431	131.1	1.1	11.3

<sup>a</sup>NDR, no dates reported; concentration cannot be determined.

<sup>b</sup>NR, not reported.

The results for these detectors are listed in the appropriate location in Appendix F. These detectors are identified by a comment in the remarks column.

#### 4.5 Data Interpretation

The precision and accuracy of the radon exposures and concentrations determined by the alpha track detectors depend upon several parameters that are not fully under the control of the investigators. The precision of the radon determination by any detector is affected by the track density, defined as tracks per unit area under observation. The precisions of the individual results have been estimated by Tech/Ops Landauer and are included as the standard deviations in Appendix F. On the other hand, the overall accuracy of radon determination is affected by the additional parameters listed below.

- *Uncertainty in calibration parameter*

This uncertainty refers to the error in determining the number of tracks recorded for known exposures. Results for the spiked samples submitted by ANL along with the unknowns indicate that the error is about 5% for detectors exposed to 1000 (pCi/L) days. The calibration parameter used by Tech/Ops Landauer is assumed to be known with an accuracy of 10% or better (at two sigma).

- *Unknown starting dates*

Some detectors were received with unknown starting dates. In all instances where ANL staff deployed the detectors, the starting date is known. However, some detectors were deployed by the house occupant or DEH personnel, and the starting dates were sometimes not recorded. In most of these cases, the starting date could be estimated with an uncertainty of about 1-2 days. For detectors exposed for a nominal 90-day monitoring period, this estimate would introduce an uncertainty of about 2% in the resulting calculated radon concentrations.

- *Estimated ending dates*

Some detectors were received with no end date recorded. In all these cases, it was assumed that the occupants were diligent in mailing the detectors soon after they were sealed. The time between mailing and receipt was assumed to be three days (nominal time for first-class mail as quoted by the postmaster at Lemont, Illinois). Thus, ending dates were assigned relative to the date on which the detector was received back at Argonne. Again, in a nominal 90-day monitoring period, an uncertainty of about 2-3% may be assumed for results derived under these circumstances.

- *Detectors returned without seals*

The mailing envelopes (manila with plastic bubble liners) are assumed to have provided the necessary protection against additional extraneous alpha radiation exposure to the detectors during transit. The error from this source could be estimated by assuming that any additional exposure occurred during the three days between mailing and receipt. Thus, the error is about 3% for a 90-day exposure.

- *Variations in replicate pairs*

Seventy pairs of detectors were used as duplicates to estimate the reproducibility of the detector responses. The replicate detectors were placed side by side in the housing units and thus were assumed to have been exposed to the same concentration of radon. Thus, any variation observed may be taken as a true indicator of the reproducibility of the measurement. The results for the duplicate detectors are shown in Appendix J. A number of the 70 pairs of field replicates were not returned, and in some instances the detectors in the pair were exposed for different durations. Aside from these situations, 56 pairs are believed to have received the same integrated exposures.

The error in the individual measurements of a pair of detectors is calculated as the percent deviation from the mean. The average of the deviations for all pairs is 10.5%. The deviation ranges from a minimum of zero to a maximum of 45.6%, with 37 of the 56 replicate pairs (66%) showing less than 10.5% variation from their respective

mean exposures and 49 of the 56 replicate pairs (88%) displaying variations from their respective mean exposures of less than 21%. Taken at face value, the average of the mean deviation is 21.4% (at the two sigma level, i.e., 95% confidence), with an equally large uncertainty in determining this number.

In summary, of all the sources of error noted above, the variation between observed and calculated exposures for the spiked detectors represents the greatest source of uncertainty. By comparison, errors introduced as a result of starting and ending date approximations will have negligible effects on results at exposure levels of 4 pCi/L and monitoring periods of at least 90 days.

#### 4.6 Unreturned Detectors

At the time of this report's production, 299 of the original 1117 detectors (26%) are yet to be returned. Detector status for each property is displayed in Table 4.3.

Efforts are continuing to retrieve all of the detectors that were deployed, but some detectors will probably never be returned. (In fact, ANL has already contacted a number of house occupants who have indicated that they have lost their detectors.) It is therefore appropriate to develop a strategy for dealing with missing data.

The most straightforward response to missing data is to resample those houses (or units) for which no data are available. Except for the different time of year and possibly differences in seasonal radon concentrations, the original sampling conditions can generally be duplicated, so that the results obtained in the new sampling effort will be immediately comparable to results obtained earlier in nearby houses.

As an alternative to the above strategy, some sort of selection criteria may be followed to monitor only those houses that are likely to yield radon concentrations near or above the action limits. In several instances, other data available from that property may provide the necessary basis to waive repeated sampling, because the expected results are

TABLE 4.3 Overall Detector Status

Property	No. Placed	No. Returned	No. Outstanding	Percent Returned
Ansonia, Conn.	17	15	2	88
East Windsor, Conn.	17	14	3	82
Fairfield, Conn.	30	26	4	87
Manchester, Conn.	33	31	2	94
Middletown, Conn.	17	17	0	100
Milford, Conn.	18	17	1	94
New Britain, Conn.	17	15	2	88
Orange, Conn.	24	20	4	83
Plainville, Conn.	36	18	18	50
Portland, Conn.	16	16	0	100
Shelton, Conn.	17	16	1	94
Westport, Conn.	17	14	2	82
Addison, Ill.	13	11	2	85
Worth, Ill.	13	11	2	85
Croom, Md.	13	9	4	69
Bedford, Mass.	19	16	3	84
Beverly, Mass.	17	9	8	53
Burlington, Mass.	13	5	8	38
Hull, Mass.	8	5	3	63
Nahant, Mass.	13	6	7	46
Randolph, Mass.	18	12	5	71
Swansea, Mass.	16	5	11	31
Topshfield, Mass.	16	12	4	75
Wakefield, Mass.	12	10	2	83
Franklin Lakes, N.J.	26	14	12	54
Holmdel, N.J.	13	11	2	85
Livingston, N.J.	35	22	13	63
Old Bridge, N.J.	13	8	5	62
Dry Hill, N.Y.	28	21	7	75
Manhattan Beach, N.Y.	76	31	45	41
Rocky Point, N.Y.	17	10	7	59
Spring Valley, N.Y.	13	9	4	69
Tappan, N.Y.	39	25	14	64
Coraopolis 71C, Penn.	5	2	3	40
Coraopolis 71L, Penn.	8	7	1	88
Dorseyville, Penn.	16	11	5	69
Elizabeth, Penn.	12	7	5	58
Elrama, Penn.	16	13	3	81
Finleyville, Penn.	12	10	2	83
Herminie, Penn.	17	15	2	88

TABLE 4.3 (Cont'd)

Property	No. Placed	No. Returned	No. Outstanding	Percent Returned
Irwin, Penn.	17	10	7	59
Monroeville, Penn.	12	11	1	92
Rural Ridge, Penn.	12	8	4	67
Davisville, R.I.	63	42	21	67
Slatersville, R.I.	19	17	2	89
Manassas, Va.	10	4	6	40
Patrick Henry, Va.	15	6	9	40
Woodbridge, Va.	11	8	3	73
Midway, Wash.	34	25	9	74
Youngs Lake, Wash.	31	26	5	84
Sun Prairie, Wisc.	118	115	3	97

likely to be well below the action limits. For example, it may be appropriate to waive resampling houses when *all* of the following conditions are satisfied:

- Missing data represent no more than 25% of the total number of inhabited structures at that property.
- The available data for that property are within a narrow range of radon concentration values (no single value varies by more than 25% from the mean value for that property).
- None of the available radon values for that property is above 80% of the action level of 4.0 pCi/L (i.e., above 3.2 pCi/L).

When *all* of the above conditions are met, the missing data would probably have yielded radon concentrations well below the action level. Therefore, those locations need not be monitored again.

## 5 Conclusions

The salient features of this radon monitoring program are summarized in Table 5.1. In all, 61 detectors placed in 55 locations (six replicate pairs) exhibited significant radon concentrations ( $\geq 4$  pCi/L). Those specific detectors, their measured radon concentrations, and the detector locations are listed in Table 5.2. This table is arranged alphabetically by state and city or township.

Army policy regarding radon requires that locations where screening measurements are at or above 4.0 pCi/L receive follow-up measurements. Fifty-five locations are affected by this requirement.

TABLE 5.1 Summary Information

Total number of structures monitored	892
Total number of detectors placed	1117
Number of detectors returned	818
Number of detectors outstanding or lost	299
Total number of replicate pairs	70
Total number of controls	50
Total number of spikes by ANL (50) and EPA (30)	80
Number of locations with radon concentrations $\geq 4.0$ pCi/L	55
Number of locations with radon concentrations $\geq 3.6$ pCi/L but $< 4.0$ pCi/L ( $> 90\%$ of the action level)	22
Number of locations with radon concentrations $\geq 3.2$ pCi/L but $< 4.0$ pCi/L ( $> 80\%$ of the action level)	54

TABLE 5.2 Structures with Radon Concentrations  $\geq 4.0$  pCi/L

Property	Address (Unit)	Detector No.	Conc. (pCi/L)
Ansonia, Conn.	9 Hughes Cir. (9) (Replicate)	1648257	8.6
Ansonia, Conn.	9 Hughes Cir. (9) (Replicate)	1648251	16.3
Ansonia, Conn.	11 Hughes Cir. (11)	1648242	10.8
Ansonia, Conn.	14 Hughes Cir. (14)	1648277	4.1
Ansonia, Conn.	15 Hughes Cir. (15)	1648252	6.7
Shelton, Conn.	8 Palmetto Cir.	1646468	5.0
Shelton, Conn.	9 Palmetto Cir.	1646465	5.9
Westport, Conn.	8 Wassell Ln. (8)	1646472	7.8
Westport, Conn.	10 Wassell Ln. (10)	1646462	4.8
Westport, Conn.	11 Wassell Ln. (11) (Relicate)	1648481	5.6
Westport, Conn.	11 Wassell Ln. (11) (Replicate)	1644204	4.8
Westport, Conn.	15 Wassell Ln. (15)	1646483	8.0
Westport, Conn.	17 Wassell Ln. (17)	1646463	5.3
Westport, Conn.	18 Wassell Ln. (18)	1646464	4.4
Westport, Conn.	20 Wassell Ln. (20)	1646489	10.6
Addison, Ill.	403 Natoma (403) (Replicate)	1644027	4.8
Addison, Ill.	403 Natoma (403) (Replicate)	1644003	5.2
Addison, Ill.	413 Army Trail Rd.	1645092	4.9
Addison, Ill.	419 Army Trail Rd. (419)	1643997	5.7
Worth, Ill.	MCA #6 (6)	1647022	5.8
Burlington, Mass.	117 S. Bedford (117)	1641184	4.1
Randolph, Mass.	6 Army St. (6)	1643099	7.7
Watertown, N.Y.	240 Coughlin Dr. (240)	1643439	4.2
Dorseyville, Penn.	S23Q Myers Ln. (23)	1436000	4.0
Elizabeth, Penn.	S84Q Route 4 (84)	1643086	12.3
Elrama, Penn.	S85Q Route 4 (85)	1643214	20.2
Elrama, Penn.	S86Q Route 4 (86)	1643200	11.4
Herminie, Penn.	S58Q Mars Hill Rd. (58)	1643208	4.1
Herminie, Penn.	S60Q Mars Hill Rd. (60)	1643196	9.8
Herminie, Penn.	S64Q Mars Hill Rd. (64)	1643224	18.0
Herminie, Penn.	S66Q Mars Hill Rd. (66)	1643213	4.3
Newport News, Va.	Unit #9 (9)	1647557	5.4
Sun Prairie, Wisc.	99 Ent Dr. (12210)	1643134	5.8
Sun Prairie, Wisc.	101 Ent Dr. (1216)	1641509	4.0
Sun Prairie, Wisc.	102 Ent Dr. (1202)	1647586	6.4
Sun Prairie, Wisc.	104 Ent Dr. (1114)	1643123	4.1
Sun Prairie, Wisc.	147 Fairchild (1001)	1647011	4.8

TABLE 5.2 (Cont'd)

Property	Address (Unit)	Detector No.	Conc. (pCi/L)
Sun Prairie, Wisc.	150 Fairchild (1101)	1647006	5.9
Sun Prairie, Wisc.	143 Harmon Cir. (1101)	1643109	4.8
Sun Prairie, Wisc.	87 N. Andrews Dr. (1102)	1643117	6.0
Sun Prairie, Wisc.	88 N. Andrews Dr. (1014)	1646980	5.2
Sun Prairie, Wisc.	121 Schumann (1018)	1644026	4.3
Sun Prairie, Wisc.	123 Schumann (1002)	1643998	4.0
Sun Prairie, Wisc.	126 Schumann (910)	1647017	4.7
Sun Prairie, Wisc.	127 Schumann (902) (Replicate)	1646986	4.8
Sun Prairie, Wisc.	127 Schumann (902) (Replicate)	1647016	4.3
Sun Prairie, Wisc.	154 Stull (1018)	1647013	4.3
Sun Prairie, Wisc.	159 Stull (1017)	1647001	17.4
Sun Prairie, Wisc.	161 Stull (1001)	1647012	4.9
Sun Prairie, Wisc.	87 W. Andrews Dr. (1106)	1646993	12.4
Sun Prairie, Wisc.	106 W. Andrews Dr. (1009) (Replicate)	1643107	5.4
Sun Prairie, Wisc.	106 W. Andrews Dr. (1001) (Replicate)	1643108	4.2
Sun Prairie, Wisc.	107 W. Andrews Dr. (1025)	1647028	4.4
Sun Prairie, Wisc.	109 W. Andrews Dr. (1057)	1643135	5.0
Sun Prairie, Wisc.	113 W. Andrews Dr. (1205) (Replicate)	1643995	6.6
Sun Prairie, Wisc.	113 W. Andrews Dr. (1205) (Replicate)	1644025	5.8
Sun Prairie, Wisc.	113 W. Andrews Dr. (12010)	1643115	9.5
Sun Prairie, Wisc.	115 W. Andrews Dr. (1214)	1644029	9.2
Sun Prairie, Wisc.	118 W. Andrews Dr. (1118)	1643112	4.0
Sun Prairie, Wisc.	119 W. Andrews Dr. (1110)	1643105	4.1
Sun Prairie, Wisc.	94 Vandenberg (1102)	1647582	4.0
Sun Prairie, Wisc.	94 Vandenberg (1106)	1643118	4.2

## References

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5. *Interim Protocols for Screening and Follow-up Radon and Radon Decay Product Measurements*, U.S. Environmental Protection Agency EPA 520/1-86-014-1 (Feb. 1987).
6. *A Citizen's Guide to Radon*, U.S. Environmental Protection Agency, Centers for Disease Control, U.S. Department of Health and Human Services OPA-86-004 (Aug. 1986).
7. *DOD Radon Assessment and Mitigation Policy*, Memorandum issued from the Deputy Assistant Secretary of Defense (Environment) (Oct. 1987).
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9. *Chart of the Nuclides*, Knolls Atomic Power Laboratory, 13th Edition (July 1983).
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## **Appendix A**

### **Enhanced Preliminary Assessment Reports Published under the Army Base Closure Program**



## Appendix A:

Enhanced Preliminary Assessment Reports Published  
under the Army Base Closure Program

Property Name, Address	Publication Date	USATHAMA Report No.
Ansonia Army Housing, Ansonia, Conn.	October 1989	CETHA-BC-CR-89018
East Windsor Army Housing, East Windsor, Conn.	October 1989	CETHA-BC-CR-89020
Fairfield Army Housing, Fairfield, Conn.	October 1989	CETHA-BC-CR-89022
Manchester Army Housing, Manchester, Conn.	October 1989	CETHA-BC-CR-89011
Middletown Army Housing, Middletown, Conn.	October 1989	CETHA-BC-CR-89024
Milford Army Housing, Milford, Conn.	October 1989	CETHA-BC-CR-89016
New Britain Army Housing, New Britain, Conn.	October 1989	CETHA-BC-CR-89014
Orange Army Housing, Orange, Conn.	October 1989	CETHA-BC-CR-89013
Plainville Army Housing, Plainville, Conn.	October 1989	CETHA-BC-CR-89015
Portland Army Housing, Portland, Conn.	October 1989	CETHA-BC-CR-89025
Shelton Army Housing, Shelton, Conn.	October 1989	CETHA-BC-CR-89023
Westport Army Housing, Westport, Conn.	October 1989	CETHA-BC-CR-89019
Addison Army Housing, Addison, Ill.	October 1989	CETHA-BC-CR-89041
Worth Army Housing, Worth, Ill.	October 1989	CETHA-BC-CR-89042
Croom Army Housing, Croom, Md.	October 1989	CETHA-BC-CR-89284
Bedford Army Housing, Bedford, Mass.	September 1989	CETHA-BC-CR-89264
Beverly Army Housing, Beverly, Mass.	September 1989	CETHA-BC-CR-89259
Burlington Army Housing, Burlington, Mass.	September 1989	CETHA-BC-CR-89256
Hull Army Housing, Hull, Mass.	September 1989	CETHA-BC-CR-89261
Nahant Army Housing, Nahant, Mass.	September 1989	CETHA-BC-CR-89263
Randolph Army Housing, Randolph, Mass.	September 1989	CETHA-BC-CR-89258
Swansea Army Housing, Swansea, Mass.	September 1989	CETHA-BC-CR-89257
Topsfield Army Housing, Topsfield, Mass.	September 1989	CETHA-BC-CR-89260

Property Name, Address	Publication Date	USATHAMA Report No.
Wakefield Army Housing, Wakefield, Mass.	September 1989	CETHA-BC-CR-89262
Wherry Army Housing, St. Louis, Mo.	November 1989	CETHA-BC-CR-89040
Clementon Army Housing, Clementon, N.J.	November 1989	CETHA-BC-CR-89028
Franklin Lakes Army Housing, Franklin Lakes, N.J.	November 1989	CETHA-BC-CR-89030
Holmdel Army Housing, Holmdel, N.J.	November 1989	CETHA-BC-CR-89027
Livingston Army Housing, East Hanover Twp., N.J.	November 1989	CETHA-BC-CR-89031
Old Bridge Army Housing, Old Bridge, N.J.	November 1989	CETHA-BC-CR-89029
Dry Hill Army Housing, Watertown, N.Y.	November 1989	CETHA-BC-CR-89035
Manhattan Beach Army Housing, Brooklyn, N.Y.	November 1989	CETHA-BC-CR-89037
Rocky Point Army Housing, Rocky Point, N.Y.	November 1989	CETHA-BC-CR-89036
Spring Valley Army Housing, Ramapo, N.Y.	November 1989	CETHA-BC-CR-89033
Tappan Army Housing, Tappan, N.Y.	November 1989	CETHA-BC-CR-89032
Coraopolis 71C Army Housing, Robinson Twp., Pa.	October 1989	CETHA-BC-CR-89003
Coraopolis 71L Army Housing, Moon Twp., Pa.	October 1989	CETHA-BC-CR-89009
Dorseyville Army Housing, Dorseyville, Pa.	October 1989	CETHA-BC-CR-89002
Elizabeth Army Housing, Elizabeth, Pa.	October 1989	CETHA-BC-CR-89010
Elrama Army Housing, Elrama, Pa.	October 1989	CETHA-BC-CR-89012
Finleyville Army Housing, Finleyville, Pa.	October 1989	CETHA-BC-CR-89005
Herminie Army Housing, Herminie, Pa.	October 1989	CETHA-BC-CR-89007
Irwin Army Housing, Irwin, Pa.	October 1989	CETHA-BC-CR-89004
Monroeville Army Housing, Monroeville, Pa.	October 1989	CETHA-BC-CR-89008
Rural Ridge Army Housing, Rural Ridge, Pa.	October 1989	CETHA-BC-CR-89001
Davisville Army Housing, North Kingston, R.I.	October 1989	CETHA-BC-CR-89281
Slatersville Army Housing, North Smithfield, R.I.	October 1989	CETHA-BC-CR-89282
Manassas Army Housing, Manassas, Va.	October 1989	CETHA-BC-CR-89286
Patrick Henry Army Housing, Newport News, Va.	October 1989	CETHA-BC-CR-89287

Property Name, Address	Publication Date	USATHAMA Report No.
Woodbridge Army Housing, Woodbridge, Va.	October 1989	CETHA-BC-CR-89285
Midway Army Housing, Kent, Wash.	November 1989	CETHA-BC-CR-89034
Youngs Lake Army Housing, Renton, Wash.	November 1989	CETHA-BC-CR-89039
Sun Prairie Army Housing, Sun Prairie, Wisc.	November 1989	CETHA-BC-CR-89043



**Appendix B**

**Preliminary Notice Materials  
for the Radon Study**



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
US ARMY TOXIC AND HAZARDOUS MATERIALS AGENCY  
ABERDEEN PROVING GROUND, MARYLAND 21010-5401



10 AUG 1989

CETHA-BC-B (50-6c)

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Radon Sampling

1. Part of the mission of this Agency, to conduct environmental surveys at all 53 stand-alone housing areas, is the performance of radon sampling for each housing unit. We plan to deploy a 90-day sampler at each unit commencing in mid-September. Representatives from Argonne National Laboratory will be deploying these units, and will need access to each residence.
2. Request that you submit the name and telephone number of a Point of Contact for the housing area(s) under your jurisdiction to this office NLT 30 Aug 89. This person will need to act as liaison with the Argonne personnel to ensure access to each unit during their visit, in order that all samplers may be properly deployed.
3. In addition, a draft letter and Radon Fact Sheet are enclosed for your use in notifying the housing residents of the upcoming sampling. Request that this office be copy furnished on the letter which is sent to the residents.
4. Results from this sampling phase should be available during 2QFY89, and will be provided for your dissemination to the housing residents at that time.
5. In the event that the 90-day sampling is not definitive, an additional sampler will be deployed, where necessary, to extend the total sampling period to a year.
6. POC for this Agency is Mr. Joseph A. Ricci, (301) 671-3461/3261.

FOR THE COMMANDER:

2 Encls

*Salvatore P. Torrisi*  
SALVATORE P. TORRISI  
Chief, Base Closure Division

## DISTRIBUTION:

Cdr, Fort Devens, ATTN: AFZD-DEE-P (Mr. Bob Winter), Fort Devens, MA  
01433-5100  
Cdr, U.S. Army Training Center & Fort Dix, ATTN: ATZD-BHP, Fort Dix, NJ  
08640-5075  
Cdr, I Corps and Fort Lewis, ATTN: AFZH-DEP-R (Mr. Lee Burnett), Fort Lewis,  
WA 98433-5000  
(CONT)

CETHA-BC (50-6c)  
SUBJECT: Radon Sampling

DISTRIBUTION: (CONT)

Cdr, U.S. Army Engineering Activity, Capital Area, ATTN: CENAC-CS  
(CPT Kenneth McLain), Building 17, 5010 Duke Street, Cameron Station,  
Alexandria, VA 22304-5050  
Cdr, CECOM, ATTN: AMSEL-PL-C (Mr. Larry Smith), Fort Monmouth, NJ 07703-5000  
Cdr, U.S. Army Charles Melvin Price Support Center, ATTN: SABAS-F  
(Ms. Janice Cook), Granite City, IL 62040-1801  
Cdr, Fort Drum, ATTN: AFKS-EH-P (Ms. Ann Waterman), Fort Drum, NY 13602-5000  
Cdr, Charles E. Kelly Support Facility, ATTN: AFGA-CK-EH-H (Mr. John Giubileo)  
Oakdale, PA 15071-5000  
Cdr, Fort McCoy, ATTN: AFZR-XD (Mr. Al Fournier), Sparta, WI 54656-5000  
Cdr, Fort Hamilton, ATTN: ATZD-EH-FH (Ms. Anne Slaker), Fort Hamilton, NY  
11252  
Cdr, U.S. Army Transportation Center and Fort Eustis, ATTN: ATZF-EHW  
(LTC Wesley J. McMillan), Fort Eustis, VA 23604  
Cdr, U.S. Army Engineer Center and Fort Belvoir, ATTN: ANFB-DEH-EN  
(Mr. Patrick McLothlin), Fort Belvoir, VA 22060-5000  
Cdr, Fort Sheridan, ATTN: AFKE-ZO-TTF (Mr. Dick Hanson), Fort Sheridan, IL  
60037-5000

CF (w/encls):

Cdr, AMC, ATTN: AMCP-O (Mr. Bob Jameson), 5001 Eisenhower Ave., Alexandria,  
VA 22333-0001  
Cdr, FORSCOM, ATTN: FCDJ-BC (Ms. Enna Roulier), Fort McPherson, GA 38330-6000  
Cdr, TRADOC, ATTN: ATCS-R (MAJ Richard Byron), Fort Monroe, VA 23651-6000  
Cdr, MDW, ATTN: ANRM-MRB (Ms. Peg Wigle), Fort Lesley J. McNair, WASH DC  
20319-5000

DRAFT LETTER OF NOTIFICATION TO OCCUPANTS

Colonel and Mrs. John Doe  
1234 Patton Drive  
Offbase Housing, US

Dear Colonel and Mrs. Doe:

The Department of Army has requested the evaluation of radon gas levels in offbase housing units. This is similar to the evaluations onbase, that you may have heard about. Information on radon and why it is a matter of concern is enclosed.

In order to measure, a small detector will be placed in your home and left there for three months. The detector is a small canister no greater than a few inches in height or diameter; it requires no electricity and makes no sound. The radon sensitive portion of the detector consists of a plastic material.

Argonne National Laboratory, a large federally funded research institution in the Midwest has been asked to carry out this project. You will be contacted by Argonne personnel in the near future who will answer your questions and place a radon detector in your home and discuss the arrangements for the return of the detector to Argonne by mail.

In the great majority of cases, radon gas is of no practical concern to the occupants of a home. For the small percentage of cases where action must be taken to reduce the radon level, the Department of Army will notify you of the need and the steps that will be taken.

Please give the people from Argonne your time and attention.

Sincerely,

## Fact Sheet on Radon

What is radon? Radon-222 is an inert radioactive gas which occurs in nature. You cannot see it, smell it, or taste it.

Radon comes from the natural breakdown (radioactive decay) of uranium and can be found in high concentrations in soils and rocks containing uranium, granite, shale, phosphate, pitchblende, and phosphates.

In outdoor air, radon is diluted to such low concentrations that it is usually nothing to worry about. However, once inside an enclosed space (such as a home or office) radon can accumulate. Indoor levels depend both on a building's construction and the concentration of radon in the underlying soil.

What is the health hazard from radon? By itself, radon gas is inert, that is, it is chemically unreactive. The health hazard from radon gas comes from its radioactive transformation or decay into radioactive by-products or radon daughters. As radon decays, its by-products attach themselves to dust particles in the air. As you breathe, the radon decay products can become trapped in your lungs. As these decay products break down further, they release small bursts of energy which can damage lung tissue and lead to increased risk of developing lung cancer. Your risk of developing lung cancer from exposure to radon depends upon the concentration of radon and the length of time you are exposed. Exposure to a slightly elevated radon level for a long time may present a greater risk of developing lung cancer than exposure to a significantly elevated level for a short time. In general, your risk increases as the level of radon and the length of exposure increase. Not everyone exposed to elevated levels of radon will develop lung cancer, and the time between exposure and the onset of the disease may be many years.

How does radon get into a home? Since radon is a gas it can move through small spaces in the soil and rock on which a house is built. Radon can seep into a home through dirt floors, cracks in concrete floors and walls, floor drains, sumps, joints, and tiny cracks or pores in hollow-block walls. Radon also can enter water within private wells and be released into a home when the water is used. The dilemma is that, right now, no one knows which houses have a radon problem and which do not.

How is radon detected? Since you cannot see or smell radon, special detectors are needed. The two most popular are the charcoal canister and the alpha track detector. Both of these devices are exposed to the air in your home, normally on the lowest liveable level, for a specified period of time, in our case a few days (charcoal canister) or 3 months (alpha track detector) and analyzed in a laboratory to provide an estimate of the radon level in the home.

**Appendix C**

**Radon Field Data Sheet**

ARGONNE NATIONAL LABORATORY  
U. S. Army Base Closure Radon Program

Field Data Sheet

Housing data:

Housing area \_\_\_\_\_ Supporting Post \_\_\_\_\_  
Street address \_\_\_\_\_ Unit No. \_\_\_\_\_  
City, State \_\_\_\_\_ Occupancy date \_\_\_\_\_  
Zip \_\_\_\_\_ Departure date \_\_\_\_\_  
(if known)

Occupants \_\_\_\_\_

Phone # (AC) \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

Detector data:

Serial # \_\_\_\_\_ Location \_\_\_\_\_  
Date opened \_\_\_\_\_  
Date due \_\_\_\_\_  
Time opened \_\_\_\_\_

Duplicate detector Yes \_\_\_\_\_ No \_\_\_\_\_

If yes, serial # \_\_\_\_\_

Person opening detector \_\_\_\_\_

Person completing form \_\_\_\_\_

Return mailer left with \_\_\_\_\_

Argonne team members \_\_\_\_\_  
\_\_\_\_\_

Additional notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Elizabeth, Elrama, and Herminie, Pennsylvania; Newport News, Virginia; and Sun Prairie, Wisconsin.

## **Appendix D**

### **Radon Detector Return Instructions**



ARGONNE NATIONAL LABORATORY

U. S. Army Base Closure Radon Program

Detector Return Instructions

Materials needed:

Rad-trak detectors  
Foil envelope  
Return mailer

Scotch tape  
Round foil seal

1. Remove round foil seal and foil envelope from return mailer.
2. Remove backing from round foil seal and place seal over holes on detector.
3. Write date on detector label in "ending date" space provided.
4. Place sealed detector in foil envelope, fold edge over and tape shut.
5. Place foil envelope with detector in return mailer, seal, and mail.
6. Do same for duplicate detector, if any. If any problems or questions, contact DEH. If DEH cannot resolve the problem, they will contact Argonne.
7. If foil envelope and/or round foil seal cannot be found, wrap detector in aluminum foil, and place in return mailer.

Return mailing address:

Argonne National Laboratory  
Army Radon Project  
P. O. Box 176  
Westmont, IL 60559



## **Appendix E**

### **Circumstantial Data for All Monitored Properties**



**Ansonia Army Housing Area**  
**Ansonia, Connecticut 06401**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1648230	01 Ford St.	01	PO Milmo	736-9688	09/10/89	12/11/89	12/18/89	92	BKP
0	02 Hughes Cir.	02	PO Flourney						[ND]
1648274	03 Hughes Cir.	03	CPO + Mrs. Bargado	736-0805	09/07/89	12/09/89	12/12/89	93	DJKP
0	04 Hughes Cir.	04	CPT Mutchko						[ND]
1648245	05 Hughes Cir.	05	PO + Mrs. Hill	736-0361	09/06/89	02/09/90	02/12/90	156	DJKP
1648270	06 Hughes Cir.	06	SSGT. Russo	735-0797	09/07/89	12/07/89	12/18/89	91	KP
1648260	07 Hughes Cir.	07	CPO + Mrs. Knight	732-4222	09/28/89	02/20/90	02/23/90	145	BKP
1648267	08 Hughes Cir.	08	CAPT + Mrs. Johnson	735-7037	09/08/89	12/08/89	12/18/89	91	BEKP
1648257	09 Hughes Cir.	09	PO Knorr	734-1747	09/07/89	12/14/89	01/12/90	24	ACDEJKP
1648251	09 Hughes Cir.	09	PO Knorr	734-1747	09/07/89	12/14/89	01/12/90	124	ACDEJKP
1648246	10 Hughes Cir.	10	CPT Lukens	736-2039	09/07/89	02/09/90	02/12/90	55	DHJKP
1648242	11 Hughes Cir.	11	MSGT Flowers	734-8993	09/12/89	12/09/89	12/18/89	88	BLP
1648272	12 Hughes Cir.	12	SSC + Mrs. Dunlap	732-5549	09/07/89	12/24/89	12/27/89	108	DJKP
1648247	13 Hughes Cir.	13	HM2/E5 Clark	732-5644	09/07/89	12/31/89	01/02/90	115	DJKP
1648277	14 Hughes Cir.	14	PO Gillespie	736-6013	09/07/89	12/07/89	12/12/89	91	CJKP
1648252	15 Hughes Cir.	15	SSG Ronney	735-5723	09/08/89	12/07/89	12/12/89	90	BKP
1648273	16 Hughes Cir.	16	PO Stickles	735-8787	09/07/89	12/15/89	12/18/89	99	CDJKP

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**East Windsor Army Housing Area  
East Windsor, Connecticut 06088  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1646457	27 Phelps Rd.	01	SGT Belets	292-1823	09/10/89	12/24/89	12/27/89	105	DJKP
1646442	29 Phelps Rd.	14	SG Wagner	623-3019	09/10/89	12/14/89	12/18/89	95	ADEJKP
1645763	29 Phelps Rd.	14	SG Wagner	623-3019	09/10/89	12/14/89	12/18/89	95	ADJKPU
1645769	31 Phelps Rd.	15	GYSGT James P. Walsh	627-9214	09/10/89	12/15/89	12/18/89	96	DJKP
1646436	33 Phelps Rd.	16	PO Jett	627-6924	09/10/89	12/15/89	12/18/89	96	DJKP
1644237	02 South Rd.	02	PO Dawson	623-0296	09/10/89	12/31/89	01/08/90	112	BNP
1645768	03 South Rd.	03	SFC Clodpeltier	623-9227	09/10/89	01/05/90	01/08/90	117	DEJKP
1645762	04 South Rd.	04	PO Hunt	627-8618	09/10/89	12/13/89	12/18/89	94	CJKP
0	05 South Rd.	05	SSG Kasko						[ND]
1644235	06 South Rd.	06	PO Eckes	623-4370	09/10/89				KP [NR]
1644249	07 South Rd.	07	SSG Ferguson	654-1727	09/10/89	01/12/90	01/15/90	124	DEJKP
1644234	08 South Rd.	08	PO Janowiak	623-7052	09/12/89	12/26/89	01/02/90	105	BKP
1645766	09 South Rd.	09	SSG Witkowski	623-0218	09/10/89	12/10/89	12/18/89	91	KP
1644248	10 South Rd.	10	CPL Thompson		09/10/89				KP [NR]
1645767	11 South Rd.	11	PO-1 Olivo	692-1360	09/10/89	02/22/90	03/02/90	165	KP
1644233	12 South Rd.	12	GYSGT Harbo	623-0215	09/10/89	02/05/90	02/13/90	148	EKP
1644246	13 South Rd.	13	CAPT Powell	292-6176	09/11/89	02/16/90	02/19/90	158	DEJNPU

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Fairfield Army Housing Area**  
**Fairfield, Connecticut 06430**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1648239	016 Jarvis Ct.	16	PO + Mrs. Bell	255-5518	09/07/89	12/24/89	12/27/89	108	DJKP
1646478	025 Jarvis Ct.	25	PO + Mrs. Luan	467-1622	09/06/89	01/12/90	01/12/90	123	KP
1644216	028 Jarvis Ct.	28	MSG + Mrs. Gommel	255-9435	09/06/89	12/07/89	12/12/89	92	KP
1644212	037 Jarvis Ct.	37	SSG + Mrs. Thomas	254-7750	09/06/89	12/07/89	12/12/89	92	CKP
1646493	042 Jarvis Ct.	42	CPO + Mrs. Menday	255-3791	09/06/89	12/06/89	12/12/89	91	KP
1648259	051 Jarvis Ct.	51	SSG + Mrs. Larkins	254-8250	09/06/89	02/05/90	02/12/90	152	KP
0	058 Jarvis Ct.	58	PO + Mrs. Gallaher						[ND]
1644202	065 Jarvis Ct.	65	PO + Mrs. Schoettner	255-6384	09/06/89				KP [NR]
1644205	070 Jarvis Ct.	70	SSG Hass	372-0042	09/06/89	02/16/90	02/23/90	163	KP
1646487	077 Jarvis Ct.	77	ISG + Mrs. McAvoy	255-5890	09/06/89	02/02/90	02/05/90	149	DJKP
1648254	084 Jarvis Ct.	84	SGT + Mrs. Pomerantz	255-0747	09/07/89	12/07/89	01/02/90	91	EKP
1644206	089 Jarvis Ct.	89	PO + Mrs. Pollin	259-7831	09/06/89	12/05/89	12/08/89	90	DJKP
1648235	100 Jarvis Ct.	100			09/07/89	02/21/90	03/07/90	167	EKP
1644201	111 Jarvis Ct.	111	CPO + Mrs. Woosley	255-4986	09/06/89	02/05/90	02/12/90	152	AKP
1644208	111 Jarvis Ct.	111	CPO + Mrs. Woosely	255-4986	09/06/89	02/05/90	02/12/90	152	AKP
1648234	320 Quincy St.	320	PO + Mrs. Parent	255-3460	09/06/89	01/03/90	01/08/90	119	BKP
1648262	321 Quincy St.	321	SSGT + Mrs. Armstrong	254-7628	09/06/89	02/24/90	02/27/90	171	BCDJKP
1648258	336 Quincy St.	336	SSG + Mrs. Judsoh	259-1683	09/06/89	12/09/89	12/12/89	94	BDEJKP
1644214	350 Quincy St.	350	MCPO + Mrs. Thomas	259-3986	09/06/89	12/16/89	12/19/89	101	KP
1646475	362 Quincy St.	362	SSG + Mrs. Simmons	254-8313	09/06/89	12/14/89	12/18/89	99	AKP
1646494	362 Quincy St.	362	SSG + Mrs. Simmons	254-8313	09/06/89	12/14/89	12/18/89	99	AKP
1648237	376 Quincy St.	376			10/01/89	02/19/90	02/27/90	141	BCJNP
1648268	377 Quincy St.	377	SGT + Mrs. Brown	254-2812	09/07/89				PK [NR]
1648275	385 Quincy St.	385	WO + Mrs. McBride		09/28/89	02/17/90	02/23/90	143	BCJNP

<sup>a</sup>Key to Remarks:

A Duplicate detectors	H Exposure < 90 days	P Capehart home
B Detector placed by occupant of DEH	J Exact duration of exposure unknown; concentration estimated	Q MCA home
C Starting date unknown	K Detector in bedroom	R Duplex (one-story) home
D Ending date unknown	L Detector in living room	S Duplex (multistory) home
E Detector received with no seal	M Detector in kitchen	T Apartment building
F No data sheet	N Detector location unknown	U Below detection limit
G Unoccupied house		[ND] No data
		[NR] Not returned

**Fairfield Army Housing Area (Cont'd)**  
**Fairfield, Connecticut 06430**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1644203	394 Quincy St.	394	CAPT + Mrs. Coleman	254-7470	09/06/89	02/20/90	02/23/90	167	DJKP
1646495	397 Quincy St.	397	TSG + Mrs. Edwards	259-1497	09/06/89	12/15/89	12/19/89	100	KP
1648264	409 Quincy St.	409	De Para	254-2317	09/06/89	02/26/90	03/06/90	173	BCKP
1648253	412 Quincy St.	412	CWO + Mrs. Verville	255-6195	09/07/89	01/05/90	01/08/90	120	DJKP
1644211	673 Reef Rd.	673	SSG Brown	254-0875	09/06/89	12/09/89	12/12/89	94	DEJKP
1644209	703 Reef Rd.	703	MSGT Andrews	255-5725	09/06/89				BNP [NR]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Manchester Army Housing Area**  
**Manchester, Connecticut 06040**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1646453	002 Nike Cir.	002	CPO Busch	649-7221	09/10/89	12/21/89	12/27/89	102	KP
1646428	007 Nike Cir.	007	SSGT Menard	646-4771	09/10/89	12/05/89	12/08/89	90	DJKP
1646427	008 Nike Cir.	008	CPO Anderson	645-6723	09/10/89	12/12/89	12/16/89	93	KP
1646429	011 Nike Cir.	011	SSGT Grant	645-6105	09/10/89	02/06/90	02/12/90	149	KP
1646456	017 Nike Cir.	017	TSGT Campbell	645-1639	09/11/89	12/31/89	01/02/90	111	BCDEJNP
1646450	018 Nike Cir.	018	PO Smith	643-7002	09/10/89	12/16/89	12/19/89	97	KP
1646449	019 Nike Cir.	019	SGT Martin	649-6266	09/10/89	12/24/89	12/27/89	105	DEJKP
1646461	027 Nike Cir.	027	TSGT Calbreath	646-9647	09/10/89	12/31/89	01/02/90	112	DEJKP
1646454	029 Nike Cir.	029	SGT Russell	643-5739	09/10/89	12/15/89	12/18/89	96	DJKP
1646459	034 Nike Cir.	034	TSGT Rollend	643-9577	09/10/89	01/10/90	01/18/90	122	KP
1645765	037 Nike Cir.	037	CPO Sepine	645-8947	09/10/89	12/10/89	12/18/89	91	BKP
1645759	041 Nike Cir.	041	WO Mohr	645-0710	09/10/89	12/24/89	12/27/89	105	DJKPU
1646425	046 Nike Cir.	046	MAJ + Mrs. Russell	646-1635	09/10/89	12/10/89	12/18/89	91	KP
1644245	049 Nike Cir.	049	SGM Lewis	643-7551	09/10/89	12/13/89	12/18/89	94	BEKP
1646452	052 Nike Cir.	052	SFC Quinn	647-0792	09/10/89	02/02/90	02/05/90	145	DJKP
1646430	055 Nike Cir.	055	LT Johnson	647-1349	09/10/89	02/19/90	02/27/90	162	KP
1645760	060 Nike Cir.	060	CPO Heideman	647-0348	09/10/89	12/15/89	12/18/89	96	BKP [NR]
1646443	061 Nike Cir.	061	SSGT Ness	646-1134	09/10/89	12/15/89	12/18/89	96	DJKP
1646439	066 Nike Cir.	066	PO McCormick	645-8249	09/10/89	01/05/90	01/08/90	117	DEJNP
1644242	069 Nike Cir.	069	SSG Wilson	646-4364	09/10/89				BKP [NR]
1646444	074 Nike Cir.	074	PO O'Brien	647-7793	09/10/89	12/10/89	12/18/89	91	KP
1646458	075 Nike Cir.	075	SSGT Rhodes	643-5160	09/10/89	12/05/89	12/08/89	86	DEJKP
1646428	079 Nike Cir.	079	PO Raymond	643-8731	09/10/89	12/09/89	12/12/89	90	EKP
1646432	083 Nike Cir.	083	CPO Lemelin	645-0038	09/10/89	02/11/90	02/14/90	154	DEJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house
- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown
- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Manchester Army Housing Area (Cont'd)**  
**Manchester, Connecticut 06040**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1646431	087 Nike Cir.	087	SSG Briggs	643-0462	09/10/89	01/09/90	01/12/90	121	DJKP
1646433	088 Nike Cir.	088	SGT Godfrey	647-9772	09/10/89	12/10/89	12/18/89	91	KPU
1646434	089 Nike Cir.	089	SGT Taylor	646-3537	09/10/89	01/05/90	01/08/90	117	ADEJKP
1646451	089 Nike Cir.	089	SGT Taylor	646-3537	09/10/89	01/05/90	01/08/90	117	ADEJKP
1644243	093 Nike Cir.	093	PO Juricic	645-0767	09/12/89	12/15/89	12/19/89	94	BKP
1646424	099 Nike Cir.	099	PO Human	645-0740	09/10/89	02/06/90	02/12/90	149	KP
1646437	102 Nike Cir.	102	SSGT Piddick	646-8170	09/10/89	12/29/89	02/23/90	110	KP
1644244	112 Nike Cir.	112	SGT Lando	649-7102	09/12/89	12/12/89	12/27/89	91	BKP
1646435	118 Nike Cir.	118	CAPT Franklin	645-8435	09/10/89	03/04/90	03/07/90	175	DJKP

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Middletown Army Housing Area**  
**Middletown, Connecticut 06457**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641543	32 Military Rd.	32	PO Manning	344-1137	09/11/89	12/16/89	01/02/90	96	KP
1644238	42 Military Rd.	42	PO Encell		09/12/89	01/16/90	01/19/90	126	BDJNP
1644226	49 Military Rd.	49	SCPO Bechiel	347-7997	09/11/89	12/11/89	12/18/89	91	KPU
1641517	50 Military Rd.	50	CPO McNeil	344-1591	09/11/89	12/15/89	12/18/89	95	DJKP
1645761	57 Military Rd.	57	GYSGT Lesh	638-3807	09/11/89	12/11/89	12/18/89	91	KP
1644232	58 Military Rd.	58	MSG Chapman	346-3363	09/11/89	12/19/89	12/27/89	99	KPU
1644229	67 Military Rd.	67	SGT Rangel	643-3817	09/11/89	12/15/89	12/18/89	95	DJKP
1644252	68 Military Rd.	68	PO McKenzie	346-0556	09/11/89	11/15/89	11/20/89	65	HKPU
1644251	73 Military Rd.	73	SSG Lugardo	347-5833	09/11/89	12/11/89	12/18/89	91	KP
1644230	74 Military Rd.	74	GYSGT Agronit	347-1929	09/11/89	12/11/89	12/18/89	91	KP
1641519	83 Military Rd.	83	Smallwood	344-1638	09/11/89	12/15/89	12/18/89	95	DJKP
1644225	84 Military Rd.	84	CPO Nielsen	344-9278	09/11/89	01/18/90	01/22/90	129	KP
1641537	89 Military Rd.	89	SRG Clark		09/12/89	12/11/89	12/18/89	90	BCJNP
1644228	90 Military Rd.	90	PO Romeo	347-7631	09/11/89	02/06/90	02/12/90	148	KP
1645758	97 Military Rd.	97	CPO Atkins	647-5578	09/11/89	12/11/89	12/18/89	91	AKPU
1644254	97 Military Rd.	97	CPO Atkins	647-5578	09/11/89	12/11/89	12/18/89	91	AKP
1641518	98 Military Rd.	98	SFC Brunson	346-8907	09/11/89	12/21/89	12/27/89	101	EKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Millford Army Housing Area  
Millford, Connecticut 06460  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1648229	01 Alpha St.	01	PO + Mrs. Boone	877-6518	09/06/89	12/06/89	12/12/89	91	KP
1646485	02 Alpha St.	02	CWO + Mrs. Wilis	878-1508	09/06/89	12/15/89	12/18/89	100	DJKP
1648477	03 Alpha St.	03	PO + Mrs. Hume	874-8230	09/06/89	12/24/89	12/27/89	109	DEJKP
1648228	04 Alpha St.	04	SSGT + Mrs. Kemp	874-7757	09/06/89	12/15/89	12/18/89	100	DEJKP
1646479	05 Alpha St.	05	PO + Mrs. Carrano	877-7146	09/06/89				KP [NR]
1644210	06 Alpha St.	06	PO + Mrs. Minitz	877-2387	09/06/89	01/05/90	01/08/90	121	ADJKP
1646491	06 Alpha St.	06	PO + Mrs. Minitz	877-2387	09/06/89	01/05/90	01/08/90	121	ADJKP
1646488	07 Alpha St.	07	SSGT + Mrs. Cecconulli	874-3929	09/06/89	12/06/89	12/12/89	91	KP
1648266	08 Alpha St.	08	SGT + Mrs. Evans	877-4637	09/06/89	02/09/90	02/12/90	156	DEJKP
1648259	09 Alpha St.	09	SGT + Mrs. Freitsch	877-4549	09/07/89	12/09/89	12/12/89	93	CDJKP
1648243	10 Alpha St.	10	PO + Mrs. Morrison		09/07/89	12/05/89	12/08/89	89	BCDJNP
1646480	11 Alpha St.	11							KP
1648250	12 Alpha St.	12	PO + Mrs. Rockwell	877-6544	09/06/89	12/07/89	12/12/89	92	KP
1648227	13 Alpha St.	13	CAPT + Mrs. Lang	288-2712	09/06/89	12/31/89	01/02/90	116	DJKP
1648249	14 Alpha St.	14	SSG + Mrs. Colper	877-3559	09/06/89	12/09/89	12/12/89	94	DJKP
1648276	15 Alpha St.	15	PO + Mrs. DeGarmo	878-3077	09/06/89	12/06/89	12/12/89	91	EKP
1648233	16 Alpha St.	16	PO Arnold	876-1609	09/06/89	12/09/89	12/12/89	94	ADJKP
1648265	16 Alpha St.	16	PO Arnold	876-1609	09/06/89	12/09/89	12/12/89	94	ADJKP

**Key to Remarks:**

A	Duplicate detectors	H	Exposure < 90 days	P	Capelhart home
B	Detector placed by occupant of DEH	J	Exact duration of exposure unknown; concentration estimated	Q	MCA home
C	Starting date unknown	K	Detector in bedroom	R	Duplex (one-story) home
D	Ending date unknown	L	Detector in living room	S	Duplex (multistory) home
E	Detector received with no seal	M	Detector in kitchen	T	Apartment building
F	No data sheet	N	Detector location unknown	U	Below detection limit
G	Unoccupied house			[ND]	No data
				[NR]	Not returned

**New Britain Army Housing Area**  
**New Britain, Connecticut 06051**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641516	006 Green St.	06	SSG Steizl	223-6996	09/12/89	12/12/89	12/18/89	91	KP
1641512	014 Green St.	14	PO Fisher	229-9356	09/12/89	12/31/89	01/02/90	110	DJKP
1641539	005 Halsey St.	05	PO Biggs	827-1975	09/12/89	12/15/89	12/18/89	94	DJKP
1644227	017 Halsey St.	17			09/13/89	12/12/89	01/02/90	90	BENP
1641511	031 Halsey St.	31	PO Alvarez	223-7338	09/12/89	12/24/89	12/27/89	103	DJKP
1641510	011 Kulper St.	11	SSGT Baugoin	224-3624	09/12/89	12/18/89	12/27/89	97	KP
1641546	012 Kulper St.	12	PO Guilford	224-8567	09/12/89	12/12/89	12/18/89	91	KP
1641534	019 Kulper St.	19	SGT Manzella	229-5604	09/12/89	01/15/90	01/18/90	125	DEJKP
1641521	020 Kulper St.	20	SSG Johnson	224-2185	09/12/89	01/16/90	01/19/90	126	DJKP
1641549	027 Kulper Rd.	27	SSG Tollner	224-8072	09/12/89	01/16/90	01/19/90	126	DEJKP
1641535	028 Kulper St.	28							INDJ
1641535	035 Kulper Rd.	35	SGT Sliker	223-9213	09/15/89	01/01/90	01/02/90	108	BCDJKP
1641540	298 Rocky Hill Ave.	298	SSG Gee	223-5391	09/12/89	02/11/90	02/14/90	152	AEJKP
1641523	298 Rocky Hill Ave.	298	SSG Gee	223-5391	09/12/89	02/11/90	02/14/90	152	AEJKP
1641520	306 Rocky Hill Ave.	306	SGT David	826-1219	09/12/89	01/01/90	01/03/90	111	KP [NR]
1641538	312 Rocky Hill Ave.	312	PO Gensel	225-9987	09/12/89	01/01/90	01/03/90	111	DEJKP
1646482	320 Rocky Hill Ave.	320	SGT Hughes	225-5141	09/12/89	12/12/89	12/18/89	91	KP

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Orange Army Housing Area**  
**Orange, Connecticut 06477**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
0	343 Smith Farm Rd.		Aganon	799-8967	09/08/89	12/11/89	12/18/89	94	[ND]
1648284	348 Smith Farm Rd.		Aganon	799-8967	09/08/89	12/11/89	12/18/89	94	AKP
1646447	348 Smith Farm Rd.		SGT Johnson	799-8710	09/08/89	12/14/89	12/18/89	97	AKP
1646445	349 Smith Farm Rd.								KP
1646440	350 Smith Farm Rd.		SSGT Stanton	795-1569	09/08/89	02/04/90	02/12/90	149	KP
1648281	351 Smith Farm Rd.		PO Brown	799-1401	09/08/89	12/11/89	12/18/89	94	KP
1646441	354 Smith Farm Rd.				10/11/89	01/11/90	01/19/90	92	BENP
1648282	355 Smith Farm Rd.		PIO Morrison	799-9874	09/08/89	10/23/89		45	AHKP
1646480	355 Smith Farm Rd.		PIO Morrison	799-9874	09/08/89	12/06/89	12/12/89	89	AKP
1646446	359 Smith Farm Rd.		PO Barbee	799-9232	09/08/89				KP [NR]
1648278	363 Smith Farm Rd.		SSG Foley	799-9817	09/08/89	12/05/89	12/08/89	88	DJKP
1648285	342 Sybil St.			799-3897	09/08/89	02/06/90	02/12/90	151	KP
1642286	345 Sybil St.		None—House closed		09/08/89	01/19/90	02/27/90	133	GMP
1646469	349 Sybil St.		SSG Beaudredu	799-8702	09/08/89	12/08/89	12/18/89	91	KP
1648279	350 Sybil St.		SSG Lewis	795-5350	09/08/89				AKP [NR]
1648280	350 Sybil St.		SSG Lewis	795-5350	09/08/89				AKP [NR]
1648286	351 Sybil St.		PO Graham	799-9220	09/08/89	12/15/89	12/18/89	98	DJKP
1642300	353 Sybil St.		PO Patterson	799-8905	09/08/89	12/08/89	12/12/89	91	KP
1646422	354 Sybil St.		SSG Madison	799-8570	09/08/89	12/08/89	12/27/89	91	AKP
1646423	354 Sybil St.		SSG Madison	799-8570	09/08/89	12/08/89	12/27/89	91	AKP
1646421	355 Sybil St.		LT Scriber	799-9116	09/08/89	12/05/89	12/08/89	90	DEJKP
1646436	358 Sybil St.		SGT Woodward	799-6307	09/08/89	12/15/89	12/18/89	98	DJKP
1648287	359 Sybil St.		PO Rivers	799-1783	09/08/89	12/24/89	12/27/89	107	DEJKP
1642286	362 Sybil St.		SFC Loeppler	799-1497	09/08/89	01/12/90	01/15/90	126	DJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Plainville Army Housing Area**  
**Plainville, Connecticut 06062**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643451	01 Cassidy Dr.	01	SSG Kohnell	747-4599	09/12/89	12/15/89	12/18/89	94	E JKP
1643438	02 Cassidy Dr.	02	SSG Home	747-0858	09/12/89				AKP [NR]
1643456	02 Cassidy Dr.	02	SSG Home	747-0858	09/12/89				AKP [NR]
1641527	03 Cassidy Dr.	03	SSG Shaw	747-9444	09/12/89	12/15/89	12/18/89	94	DE JKP
0	04 Cassidy Dr.	04	SSG Morrison						[ND]
1643454	05 Cassidy Dr.	05	PO Ewing	793-9961	09/12/89				KP [NR]
1643455	06 Cassidy Dr.	06	SGT Cramer	793-9377	09/12/89	12/15/89	12/18/89	94	D JKP
1641552	07 Cassidy Dr.	07	CAPT Larkin	747-1643	09/12/89				KP [NR]
1643423	08 Cassidy Dr.	08	SSG Robinson	793-6817	09/12/89				KMP [NR]
1641550	09 Cassidy Dr.	09	SFC Cannamela	747-6953	09/12/89	12/31/89	01/02/90	110	D JKP
1641533	10 Cassidy Dr.	10	SGT Hand	747-3785	09/12/89	12/13/89	12/18/89	92	D JKP
0	11 Cassidy Dr.	11	SSG Berkley						[ND]
1641525	12 Cassidy Dr.	12	PO Brick	747-2041	09/12/89	12/13/89	12/18/89	92	AKP
1641526	12 Cassidy Dr.	12	PO Brick	747-2041	09/12/89	12/13/89	12/18/89	92	AKP
1641560	13 Cassidy Dr.	13	MSGT Owens	747-1099	09/12/89	12/11/89	12/18/89	90	EKP
1641553	14 Cassidy Dr.	14	SSG Widener	793-9031	09/12/89				KP [NR]
1641514	15 Cassidy Dr.	15	SSGT Tibbett	793-9022	09/12/89	12/11/89	12/14/89	90	D JKP
1641515	16 Cassidy Dr.	16	PO Zanetelli	747-3299	09/12/89				KP [NR]
1641536	17 Cassidy Dr.	17	Wright	747-8328	09/12/89				AKP [NR]
1641522	17 Cassidy Dr.	17	Wright	747-8328	09/12/89				AKP [NR]
1641547	18 Cassidy Dr.	18	SGT Haire	747-5590	09/12/89				KP [NR]
1641555	19 Cassidy Dr.	19	SGT Vesey	793-9233	09/12/89				KP [NR]
1641559	20 Cassidy Dr.	20	GY Chelkowski	747-0355	09/12/89	12/15/89	12/18/89	94	DE JKP
0	21 Cassidy Dr.	21	PO Runyan						[ND]

<sup>a</sup>Key to Remarks:

- |                                      |   |                            |
|--------------------------------------|---|----------------------------|
| A Duplicate detectors                | H Exposure < 90 days  | P Capchart home            |
| B Detector placed by occupant of DEH | J Exact duration of exposure unknown; concentration estimated | Q MCA home                 |
| C Starting date unknown              | K Detector in bedroom   | R Duplex (one-story) home  |
| D Ending date unknown                | L Detector in living room                                     | S Duplex (multistory) home |
| E Detector received with no seal     | M Detector in kitchen   | T Apartment building       |
| F No data sheet                      | N Detector location unknown                                   | U Below detection limit    |
| G Unoccupied house                   |   | [ND] No data               |
|                                      |   | [NR] Not returned          |

**Plainville Army Housing Area (Cont'd)**  
**Plainville, Connecticut 06062**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641551	22 Cassidy Dr.	22	SSGT Nelson	747-0155	09/12/89	12/11/89	12/14/89	90	KP [NR]
1641532	23 Cassidy Dr.	23		747-2797	09/12/89	12/15/89	12/18/89	94	DJKPU
1641544	24 Cassidy Dr.	24	PO Hiplins	793-2076	09/12/89				KP
0	25 Cassidy Dr.	25	SSGT Semanski						[ND]
1641557	26 Cassidy Dr.	26	SGT Weathers	793-2657	09/12/89	03/03/90	03/07/90	172	EKP
0	27 Cassidy Dr.	27	SGT Clark						[ND]
1641558	28 Cassidy Dr.	28	GYSGT Wurdinger	747-1799	09/12/89	12/12/89	12/19/89	91	KP
0	29 Cassidy Dr.	29	MSGT Hann						[ND]
1641556	30 Cassidy Dr.	30	PO Broussard	793-9981	09/12/89	12/15/89	12/18/89	94	DJKP
1641529	31 Cassidy Dr.	31	SGT Williams	793-9455	09/12/89	12/14/89	12/18/89	93	KP
1641545	32 Cassidy Dr.	32	Webb	747-2131	09/12/89	12/15/89	12/18/89	94	ADEJKP
1641513	32 Cassidy Dr.	32	Webb					94	ADEJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Portland Army Housing Area  
Portland, Connecticut 06480  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1644250	01 Thompson Hill Rd.	01	PO Morrow	342-3748	09/11/89	12/10/89	12/16/89	90	KP
1645757	02 Thompson Hill Rd.	02	PO Okon	342-4276	09/11/89	12/14/89	12/22/89	94	KP
1644218	03 Thompson Hill Rd.	03	PO Stage	342-0232	09/11/89	12/11/89	12/16/89	91	KP
1644222	04 Thompson Hill Rd.	04	SSG Warner	342-2366	09/11/89	12/11/89	12/16/89	91	AKP
1644224	04 Thompson Hill Rd.	04	SSG Warner	342-2366	09/11/89	12/11/89	12/16/89	91	AKP
1644219	05 Thompson Hill Rd.	05	PO Ensminger	342-2876	09/11/89	12/14/89	12/18/89	94	KP
1644241	06 Thompson Hill Rd.	06	CPO Donicz	342-1083	09/11/89	12/11/89	12/16/89	91	KP
1644255	07 Thompson Hill Rd.	07	PO Tilden	342-3106	09/11/89	12/11/89	12/16/89	91	KP
1644221	08 Thompson Hill Rd.	08	SSGT Simmons	342-1707	09/11/89	12/11/89	12/16/89	91	KP
1644223	09 Thompson Hill Rd.	09	PO Gardner	342-3676	09/11/89	12/12/89	12/18/89	92	KP
1645764	10 Thompson Hill Rd.	10	SSG Simmons	342-0729	09/11/89	01/13/90	01/16/90	124	DJKP
1644220	11 Thompson Hill Rd.	11	PO Creighton	342-0373	09/11/89	12/24/89	12/27/89	104	CDJKP
1644231	13 Thompson Hill Rd.	13	PO Kehrer	342-1771	09/11/89	12/10/89	12/16/89	90	KP
1644236	14 Thompson Hill Rd.	14	PO Shiner		09/28/89				ECDJNP[NR]
1644240	15 Thompson Hill Rd.	15	PO Gallagher		09/28/89	12/11/89	12/16/89	74	BCHJNP
1644247	16 Thompson Hill Rd.	16	PO Brinson	342-4348	09/11/89	12/31/89	01/02/90	111	DEJKP

**aKey to Remarks:**

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Shelton Army Housing Area  
Shelton, Connecticut 06484  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1648232	01 Palmetto Cir.	01	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1646466	02 Palmetto Cir.	02	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1648238	03 Palmetto Cir.	03	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1648236	04 Palmetto Cir.	04	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1648241	05 Palmetto Cir.	05	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1648261	06 Palmetto Cir.	06	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1648240	07 Palmetto Cir.	07	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1646468	08 Palmetto Cir.	08	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1646465	09 Palmetto Cir.	09	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1648256	10 Palmetto Cir.	10	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1642315	11 Palmetto Cir.	11	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
0	12 Palmetto Cir.	12	None--Site closed						[ND]
1642309	13 Palmetto Cir.	13	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1646471	14 Palmetto Cir.	14	None--Site closed		09/08/89	03/13/90	03/16/90	192	AGMP
1648231	14 Palmetto Cir.	14	None--site closed		09/08/89	03/13/90	03/16/90	192	AGMP
1642301	15 Palmetto Cir.	15	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP
1646045	16 Palmetto Cir.	16	None--Site closed		09/08/89	03/13/90	03/16/90	192	GMP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Westport Army Housing Area**  
**Westport, Connecticut 06880**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (203)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1644207	01 Wassell Lane	01	SSG Viola Redic	454-3164	09/05/89	03/03/90	03/12/90	179	KP
1644213	03 Wassell Lane	03	SSGT Robert Nosal	227-6005	09/05/89	01/12/90	01/15/90	129	DJKP
1646484	05 Wassell Lane	05	SFC Fernando Quiles	222-7892	09/05/89	03/16/90	03/27/90		DJKP [NR]
1646490	06 Wassell Lane	06	PO Keith Bell	454-4032	09/05/89	12/16/89	12/19/89	102	DEJKP
1646486	07 Wassell Lane	07	AT2 Piccola N Pina	454-1935	09/05/89				KP [NR]
1646472	08 Wassell Lane	08	MSG Steven Israel	222-2230	09/05/89	02/07/90	02/14/90	155	EMP
1646474	09 Wassell Lane	09	PO Lutes	454-0563	09/05/89	12/05/89	12/08/89	91	KP
1646462	10 Wassell Lane	10	TSGT R. Denauh	454-2782	09/05/89	12/05/89	12/12/89	91	BNP
1646481	11 Wassell Lane	11	SFC Paul Dobrinsky	454-4506	09/05/89	12/17/89	12/22/89	103	AKP
1644204	11 Wassell Lane	11	SFC Paul Dobrinsky	454-4506	09/05/89	12/17/89	12/27/89	103	AKP
1646473	12 Wassell Lane	12	SSG Patrick + Mrs. Neary	221-0555	09/05/89				MP [NR]
1646483	15 Wassell Lane	15	SGT William Mendez	454-8743	09/05/89	12/15/89	12/18/89	101	BCDEJNP
1646476	16 Wassell Lane	16	GYSGT Gregory L. Flick	454-2167	09/05/89	12/05/89	12/27/89	91	KP
1646463	17 Wassell Lane	17	LCDR + Mrs. Paul B. Webb	226-8744	09/05/89	12/10/89	12/18/89	96	KP
1646464	18 Wassell Lane	18	CORPMAN Philbin	454-4879	09/05/89	02/07/90	02/12/90	155	LP
1644217	19 Wassell Lane	19	MSGT George Johnson	454-0109	09/05/89	12/15/89	12/18/89	101	DEJKP
1646489	20 Wassell Lane	20	SSG + Mrs. Cherico	222-1718	09/05/89	12/05/89	12/08/89	91	DJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Addison Army Housing Area  
Addison, Illinois 60101  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (708)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643999	403 Army Trail Rd.	403	Hall	543-0999	09/07/89				KP [NR]
1645086	409 Army Trail Rd.	409	Mr. Odehirk	543-6265	09/07/89	12/05/89	12/08/89	89	DJKP
1645092	413 Army Trail Rd.	413	Melendez German	543-3497	09/07/89	03/08/90	03/13/90	182	KP
1643997	419 Army Trail Rd.	419	W. Decorrevon	543-5438	09/07/89	12/07/89	12/12/89	91	BNP
1644027	403 Natoma	403	Benning	543-3404	09/07/89	01/08/90	01/10/90	123	AKP
1644003	403 Natoma	403	Benning	543-3404	09/07/89	01/08/90	01/10/90	123	AKP
1644024	404 Natoma	404	Rosenbaum		09/07/89	03/08/90	03/13/90	182	KP
1645086	410 Natoma	410	Sutton	628-8332	09/07/89	12/07/89	12/08/89	91	KP
1645087	411 Natoma	411	Sheila West		09/07/89	03/08/90	03/16/90	182	KP
1644002	414 Natoma	414	Henderson	832-9672	09/07/89	12/07/89	12/12/89	91	KP
0	415 Natoma	415							[ND]
1643991	420 Natoma	420	Roy	628-1397	09/07/89	03/12/90	03/15/90	186	DEJKP
1643994	423 Natoma	423	Jackie Carrington	543-3930	09/07/89	03/10/90	03/13/90	184	KP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capshart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Worth Army Housing Area**  
**Worth, Illinois 60463**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (708)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1644020	MCA #01	01	Hatch	597-1410	09/08/89	12/08/89	12/12/89	91	KP
1647030	MCA #02	02	James Means	597-2293	09/08/89	12/08/89	12/12/89	92	AKP
1647031	MCA #02	02	James Means	597-2293	09/08/89	12/08/89	12/12/89	92	AKP
1644021	MCA #03	03	Robert Smith	389-4786	09/08/89	02/23/90	02/26/90	168	DJKP
1644004	MCA #04	04			09/08/89	12/13/89	12/18/89	96	KP
1644005	MCA #05	05	Hunt	385-7564	09/08/89	12/15/89	12/18/89	98	DEJKP
1647022	MCA #06	06	Bob Johnstone	389-8512	09/08/89	02/07/90	02/15/90	152	KP
1647036	MCA #07	07	Kohlmorgeh	597-4337	09/08/89	01/19/90	01/22/90	133	DEJKP
1641506	MCA #08	08	Les Varisco	385-6261	09/08/89	12/08/89	12/12/89	91	KP
1647027	MCA #09	09	Bassett	389-2176	09/08/89	12/14/89	12/18/89	97	EKP
1644000	MCA #10	10			09/08/89				KP [NR]
1641508	MCA #11	11	Rynn	371-2711	09/08/89	12/08/89	12/08/89	91	KP
1641507	MCA #12	12	Flowers	371-5627	09/08/89	12/19/89	04/02/90		KP [NR]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Croom Army Housing Units  
Croom, Maryland  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (301)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643678	15470 Mt. Calvert Rd.	09A	David	952-0678	09/11/89	01/09/90	01/23/90	120	L T
1643993	15472 Mt. Calvert Rd.	09B	Carl Ingram, Jr.	954-0547	09/12/89	01/27/90	02/27/90	137	M T
1643676	15474 Mt. Calvert Rd.	09C	Neal	627-4807	09/12/89	01/27/90	02/27/90	137	K T
1643677	15476 Mt. Calvert Rd.	09D	Kelly Williams	627-1996	09/11/89				A K T [NR]
1643685	15478 Mt. Calvert Rd.	09D	Kelly Williams	627-1996	09/11/89				A K T [NR]
1643686	15478 Mt. Calvert Rd.	09E	Kimpson	627-7416	09/12/89	02/01/90	02/27/90	142	M T
	15484 Mt. Calvert Rd.	12A							[ND]
	15486 Mt. Calvert Rd.	12B							[ND]
1643687	15488 Mt. Calvert Rd.	12C	Deborah Isaac	627-0530	09/12/89	01/27/90	02/27/90	137	B N T
1643688	15492 Mt. Calvert Rd.	04A	Bebergel	627-1178	09/11/89	01/19/90	01/23/90	130	B N T
1647549	15494 Mt. Calvert Rd.	04B	Baysden	627-8349	09/12/89	02/11/90	02/27/90	152	B N T
1643680	15496 Mt. Calvert Rd.	04C	Wells	952-1251	09/11/89	01/19/90	01/24/90	130	B N T
1647553	15498 Mt. Calvert Rd.	04D	Daniel Speller	627-9734	09/11/89	01/19/90	01/25/90	130	B N T

**<sup>a</sup>Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Bedford Army Housing Area**  
**Bedford, Massachusetts 01730**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (617)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641159	01 Lewis Rd.	01	Mark Hertel		09/08/89	10/02/89	10/05/89	24	BHKP
1641189	02 Lewis Rd.	02	Pat Boyd	275-1578	09/07/89	12/07/89	12/12/89	91	BKP
1641166	03 Lewis Rd.	03	Theodius Sanders	271-0652	09/10/89				BKP [NR]
1641197	04 Lewis Rd.	04	Melanie Sewell	275-0519	09/07/89				KP [NR]
1641196	05 Lewis Rd.	05	Nancy Graham	275-1744	09/07/89	12/24/89	12/27/89	108	ADJKP
1641170	05 Lewis Rd.	05	Nancy Graham	275-1744	09/07/89	12/24/89	12/27/89	108	ADJKP
1645785	06 Lewis Rd.	06	Thomas + Lisa Scruton	275-2752	09/07/89	12/11/89	12/13/89	95	KP
1641187	01 Mickelson Rd.	1	Daniel Randolph		09/11/89	12/10/89	12/18/89	90	BKP
1641160	02 Mickelson Rd.	2	David Coffey	275-4687	09/11/89	12/10/89	12/18/89	90	BKP
1641161	03 Mickelson Rd.	3		275-5745	09/10/89				BKP [NR]
1645784	04 Mickelson Rd.	4	Carl Giron	375-5221	09/07/89	12/15/89	12/18/89	99	CDJKP
1641171	05 Mickelson Rd.	5			09/07/89	12/07/89	12/19/89	91	BNP
1641176	06 Mickelson Rd.	6	S. Alford		09/07/89	12/07/89	12/12/89	91	BCJNP
1641193	33 Pine Hill Rd.	33	Val Buckley	275-7041	09/11/89	02/11/90	02/15/90	153	NP
1641172	35 Pine Hill Rd.	35	Nancy + Robert Harkins	275-4471	09/07/89	12/07/89	01/02/90	91	AKP
1641175	35 Pine Hill Rd.	35	Nancy + Robert Harkins	275-4471	09/07/89	12/07/89	01/02/90	91	AKP
1641168	37 Pine Hill Rd.	37	Tina Sexton	275-9026	09/07/89	12/31/89	01/02/90	115	ACDJKP
1641179	37 Pine Hill Rd.	37	Tina Sexton	275-9026	09/07/89	12/31/89	01/02/90	115	ACDEJKP
1641180	39 Pine Hill Rd.	39	Myra + Steven Wilkins	275-5419	09/07/89	02/24/90	02/27/90	170	DEJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Beverly Army Housing Area  
Beverly, Massachusetts 01915  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (508)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
0	40 Laurel St.	40							[ND]
0	41 Laurel St.	41							[ND]
1645807	42 Laurel St.	42	William Simons	921-0219	09/06/89	12/21/89	01/02/90	106	K P
0	43 Laurel St.	43							[ND]
0	44 Laurel St.	44							[ND]
1645817	45 Laurel St.	45	Tony + Tammy Anderson	921-1228	09/06/89	02/05/90	02/08/90	152	K P
0	46 Laurel St.	46							[ND]
1645793	47 Laurel St.	47	Roger Koble	922-9202	09/08/89	12/09/89	12/12/89	92	BCDEJKP
1645773	48 Laurel St.	48	Hice Beverly	927-5400	09/06/89	12/09/89	12/12/89	94	DJKP
0	49 Laurel St.	49							[ND]
1645808	50 Laurel St.	50	Linda Davis (Jerry)	927-8240	09/06/89	10/04/89	10/09/89	28	EHKP
1642311	51 Laurel St.	51	Martin McCall	927-2086	09/06/89	03/07/90	03/13/90	182	K P
0	52 Laurel St.	52							[ND]
0	53 Laurel St.	53							[ND]
1645810	54 Laurel St.	54	Cathy Greenleaf	922-3076	09/06/89	12/15/89	12/18/89	100	ADJKP
1645809	54 Laurel St.	54	Cathy Greenleaf	922-3076	09/06/89	12/15/89	12/18/89	100	ADJKP
1645800	55 Laurel St.	55			09/07/89	01/15/90	01/18/90	130	BCDEJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house

- H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom  
L Detector in living room  
M Detector in kitchen  
N Detector location unknown

- P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Burlington Army Housing Area  
Burlington, Massachusetts 01803  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (617)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
0	113 South Bedford	113							[ND]
1641198	115 South Bedford	115	Shirley Bell	272-6182	09/07/89	01/19/90	01/22/90	134	CDJKQ
1641184	117 South Bedford	117	SGT Barry W. Sall	273-1734	09/07/89	12/20/89	01/02/90	104	KQ
1641181	119 South Bedford	119	John Wescott	272-2863	09/07/89				A KQ [NR]
1641201	119 South Bedford	119	John Wescott	272-2863	09/07/89				A KQ [NR]
1641167	121 South Bedford	121	Linda Michael	273-4323	09/07/89	01/14/90	01/17/90	129	CDJKQ
1641163	123 South Bedford	123	Jody + Roland Hart	273-4663	09/07/89	01/14/90	01/17/90	129	DEJKQ
0	125 South Bedford	125							[ND]
0	127 South Bedford	127							[ND]
0	129 South Bedford	129							[ND]
1641192	131 South Bedford	131	Brigitte Dietter	229-1155	09/07/89	12/31/89	01/02/90	115	CDJKQ
0	133 South Bedford	133							[ND]
0	135 South Bedford	135							[ND]

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house

H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom  
L Detector in living room  
M Detector in kitchen  
N Detector location unknown

P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Hull Army Housing Area**  
**Hull, Massachusetts 02045**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (617)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641202	1153 Nantasket	1153	SSG Sabir & Family	925-6134	09/15/89	12/18/89	12/27/89	94	B K P
0	1155 Nantasket	1155							[ND]
1641186	1157 Nantasket	1157	Robin Plumlee	925-3856	09/07/89	10/03/89	10/05/89	26	H K P U
0	1159 Nantasket	1159							[ND]
0	1161 Nantasket	1161							[ND]
1641169	1163 Nantasket	1163	Bernadette Frazier	925-4540	09/07/89	12/24/89	12/27/89	108	D J K P
1643093	1165 Nantasket	1165	Mary Mott	925-1043	09/07/89	12/07/89	12/12/89	91	K P
1641157	1167 Nantasket	1167	Terry Johnson	925-5090	09/07/89	01/05/90	01/08/90	120	C D E J K P

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Nahant Army Housing Area**  
**Nahant, Massachusetts 01908**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No (617)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
0	294 Castle Rd.	294							[ND]
1645782	298 Castle Rd.	296	Barbara Hannon	593-6461	09/06/89	12/16/89	12/19/89	101	KQ [NR]
1645772	298 Castle Rd.	298	Renee Fleisher	593-3257	09/06/89				DEJKQ
1645783	300 Castle Rd.	300	FARA Francisco Solo	592-5223	09/06/89				KQ [NR]
1645805	114 Gardiner Rd.	114	James Freeman	549-0772	09/06/89	12/09/89	12/12/89	94	CDJKQ
1645781	116 Gardiner Rd.	116	Christine Fraser	592-1592	09/06/89	12/09/89	12/12/89	94	ADJKQ
1645780	116 Gardiner Rd.	116	Christine Fraser	592-1592	09/06/89	12/09/89	12/12/89	94	ADJKQ
1645804	001 Goddard Dr.	1	Ada King	593-8451	09/06/89	12/24/89	12/27/89	109	CDEJKQ
0	002 Goddard Dr.	2							[ND]
1645774	003 Goddard Dr.	3	Tong Russo	539-4157	09/06/89	12/11/89	12/18/89	96	EKQ
0	004 Goddard Dr.	4							[ND]
0	006 Goddard Dr.	5							[ND]
1645812	008 Goddard Dr.	6			09/06/89				KQ [NR]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Randolph Army Housing Area  
Randolph, Massachusetts 02368  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (617)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645822	01 Army St.	01	Richard Bathoney	986-5415	09/07/89	12/19/89	12/22/89	103	CDJKP
1641190	02 Army St.	02	Hector Castellano	986-8734	09/07/89	01/23/90	01/26/90	138	AKP [NR]
1641162	02 Army St.	02	Hector Castellano	986-8734	09/07/89	12/09/89	12/12/89	93	AKP
1641191	03 Army St.	03	Victor + Kelly Herrera	961-5038	09/07/89	12/09/89	12/12/89	93	DJKP
0	04 Army St.	04							[ND]
1641195	05 Army St.	05	Jose Barbosa	963-5307	09/07/89	01/08/90	02/19/90	123	EKP
1643099	06 Army St.	06	William Janey	986-0125	09/07/89	12/09/89	12/12/89	93	DEJKP
0	07 Army St.	07							[ND]
1641173	08 Army St.	08	Sharon + Peter Hemstra	986-0138	09/07/89	12/08/89	12/12/89	92	DJKP
0	09 Army St.	09							[ND]
1645778	10 Army St.	10	Fred + Robin Campbell	961-4216	09/07/89	12/15/89	12/18/89	99	DJKP
1641183	11 Army St.	11	Thomas White	963-8002	09/07/89	02/07/90	02/14/90	153	KP
1645770	12 Army St.	12	Angela D. Carter	963-5945	09/07/89	12/15/89	12/18/89	99	CDEJKP
1641158	13 Army St.	13	Mr. + Mrs. Lodge	963-5204	09/07/89	12/15/89	12/18/89	99	DEJKP
0	14 Army St.	14							[ND]
1643094	15 Army St.	15		961-4741	09/08/89	12/07/89	01/02/90	90	BENP
1641177	16 Army St.	16	Travis Welden	963-8938	09/07/89	03/10/90	03/13/90	184	CJKP

<sup>a</sup>Key to Remarks:

- |   |  |  |
|---|--|--|
| <p>A Duplicate detectors<br/>B Detector placed by occupant of DEH<br/>C Starting date unknown<br/>D Ending date unknown<br/>E Detector received with no seal<br/>F No data sheet<br/>G Unoccupied house</p> | <p>H Exposure &lt; 90 days<br/>J Exact duration of exposure unknown; concentration estimated<br/>K Detector in bedroom<br/>L Detector in living room<br/>M Detector in kitchen<br/>N Detector location unknown</p> | <p>P Capehart home<br/>Q MCA home<br/>R Duplex (one-story) home<br/>S Duplex (multistory) home<br/>T Apartment building<br/>U Below detection limit<br/>[ND] No data<br/>[NR] Not returned</p> |
|---|--|--|

**Swansea Army Housing Area  
Swansea, Massachusetts 02777  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (508)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1644330	01 Missile Loop	01	Chyll Troxell	675-8607	09/08/89	12/15/89	12/18/89	98	CDJKP
0	02 Missile Loop	02							[ND]
1644331	03 Missile Loop	03	Cynthia Shaglor (Grant)	677-9805	09/08/89	03/10/90	03/13/90	183	KP
1644327	04 Missile Loop	04	Mayra Fuentes	673-1996	09/08/89	12/09/89	12/12/89	92	CDEJKP
0	05 Missile Loop	05							[ND]
1643095	06 Missile Loop	06	Pat		09/08/89	12/31/89	01/02/90	114	CDJKP
1643090	07 Missile Loop	07	Mark + Kathy Moriarty	678-2598	09/08/89				KP [NR]
0	08 Missile Loop	08							[ND]
1643078	09 Missile Loop	09	Linda White	677-1808	09/08/89				KP [NR]
0	10 Missile Loop	10							[ND]
1644333	11 Missile Loop	11	Debbie Cassidy		09/08/89	12/15/89	12/18/89	98	DJKP
0	12 Missile Loop	12							[ND]
0	13 Missile Loop	13							[ND]
0	14 Missile Loop	14							[ND]
0	15 Missile Loop	15							[ND]
0	16 Missile Loop	16							[ND]

**<sup>a</sup>Key to Remarks:**

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Topfield Army Housing Area  
Topfield, Massachusetts 01883  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (508)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645786	01 Nike Village	01	Mariana Hernandez	887-8827	09/06/89	12/06/89	12/12/89	91	KP
1645813	02 Nike Village	02	Bob Colpitts	887-8106	09/06/89	12/10/89	12/13/89	95	DEJKP
1645816	03 Nike Village	03	Deborah Wheeler	887-2582	09/06/89	01/02/90	01/05/90	118	DJKP
1645795	04 Nike Village	04	Donald Perkins	887-5068	09/06/89				KP [NR]
1645794	05 Nike Village	05	James Dressling	887-2649	09/06/89	12/10/89	12/13/89	95	DJKP
1645792	06 Nike Village	06	John M. Christopher	887-6302	09/06/89	01/31/90	02/05/90	147	KP
1645790	07 Nike Village	07							[ND]
	08 Nike Village	08	David Hoover	887-3401	09/11/89	12/11/89	12/18/89	91	BEKP
1645815	09 Nike Village	09	Julie Bushell	887-9022	09/11/89	01/05/90	01/08/90	116	BDJKP
1645802	10 Nike Village	10	Debra Buffinton	887-3218	09/06/89				KP [NR]
1645801	11 Nike Village	11	Carol Fortin	887-9873	09/06/89	12/15/89	12/18/89	100	DJKP
1645820	12 Nike Village	12	Maria Keeton	887-3523	09/06/89	12/05/89	12/08/89	90	DJKP
1645788	13 Nike Village	13	Henry Hoan	887-9376	09/09/89	12/09/89	12/18/89	91	BKP
1645814	14 Nike Village	14	Luanne SoyKora	887-6546	09/09/89	02/06/90	02/12/90	150	BNP
1645787	15 Nike Village	15	Gary R. Walls	887-9435	09/06/89	02/05/90	02/08/90	152	DEJKP
0	16 Nike Village	16							[ND]

<sup>a</sup>Key to Remarks:

- |   |  |   |
|---|--|---|
| <p>A Duplicate detectors<br/>B Detector placed by occupant of DEH<br/>C Starting date unknown<br/>D Ending date unknown<br/>E Detector received with no seal<br/>F No data sheet<br/>G Unoccupied house</p> | <p>H Exposure &lt; 90 days<br/>J Exact duration of exposure unknown; concentration estimated<br/>K Detector in bedroom<br/>L Detector in living room<br/>M Detector in kitchen<br/>N Detector location unknown</p> | <p>P Capsheart home<br/>Q MCA home<br/>R Duplex (one-story) home<br/>S Duplex (multistory) home<br/>T Apartment building<br/>U Below detection limit<br/>[ND] No data<br/>[NR] Not returned</p> |
|---|--|---|

**Wakefield Army Housing Area**  
**Wakefield, Massachusetts 01980**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (617)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645776	091 Hopkins	091	Paul Anderson	942-0412	09/10/89	01/12/90	01/15/90	124	KQ [NR]
1644320	099 Hopkins	099	Ted Achorn		09/10/89	12/30/89	01/05/90	111	DEJKQ
1644326	107 Hopkins	107	P. Monisseau	942-1671	09/10/89	12/10/89	12/13/89	91	BCJNQ
1643085	002 Torrance	02	Carl Grover	944-5709	09/10/89	12/10/89	12/13/89	91	KQ
1643070	006 Torrance	06	Robert Gunther	944-1889	09/10/89	12/10/89	12/13/89	91	KQ
1643079	007 Torrance	07	Joe Hernandez	944-9670	09/10/89	12/17/89	12/22/89	98	KQ
1643092	010 Torrance	10	David Holliger	944-7617	09/10/89	12/10/89	12/18/89	91	KQ
1643089	011 Torrance	11	SFC Rivera & Family	942-2143	09/13/89	12/31/89	01/03/90	109	KQ
0	012 Torrance	12							[ND]
1643081	015 Torrance	15	Rick Young	942-0417	09/10/89	12/15/89	12/18/89	96	DJKQ
1642332	016 Torrance	16	Donna Pandegrass	942-0089	09/10/89	12/31/89	01/02/90	112	DJKQ
1644337	020 Torrance	20			09/10/89	12/15/89	12/18/89	96	BDJNQ

<sup>a</sup>Key to Remarks:

- |   |   |   |
|---|---|---|
| <p>A Duplicate detectors<br/> B Detector placed by occupant of DEH<br/> C Starting date unknown<br/> D Ending date unknown<br/> E Detector received with no seal<br/> F No data sheet<br/> G Unoccupied house</p> | <p>H Exposure &lt; 90 days<br/> J Exact duration of exposure unknown; concentration estimated<br/> K Detector in bedroom<br/> L Detector in living room<br/> M Detector in kitchen<br/> N Detector location unknown</p> | <p>P Capehart home<br/> Q MCA home<br/> R Duplex (one-story) home<br/> S Duplex (multistory) home<br/> T Apartment building<br/> U Below detection limit<br/> [ND] No data<br/> [NR] Not returned</p> |
|---|---|---|

**Franklin Lakes Army Housing Area  
Franklin Lakes, New Jersey 07430  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (201)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643652	213 Patrick Brems Dr.	213	Mr. + Mrs. Rivera	327-6071	09/09/89	12/09/89	01/02/90	91	LP
1643647	214 Patrick Brems Dr.	214	Mr. + Mrs. Laminaga	327-0970	09/09/89	02/13/90	03/01/90	157	LP
1643648	215 Patrick Brems Dr.	215	Mr. + Mrs. O'Rourke	825-4366	09/09/89	02/03/90	02/08/90	147	LP
1643665	216 Patrick Brems Dr.	216	Mr. + Mrs. Torres	818-1863	09/09/89	12/10/89	12/13/89	92	DJLP
1643651	217 Patrick Brems Dr.	217	Mr. + Mrs. Decaires						NP [NR]
1643658	218 Patrick Brems Dr.	218	Mr. + Mrs. Colon (mayor)	825-1661	09/09/89	01/14/90	01/18/90	127	AKP
1643673	218 Patrick Brems Dr.	218	Mr. + Mrs. Colon (mayor)	825-1661	09/09/89	01/14/90	01/15/90	127	AKP
1643637	219 Patrick Brems Dr.	219	Mr. + Mrs. Bryant						BNP [NR]
1643671	220 Patrick Brems Dr.	220	Mr. + Mrs. Ayala						BNP [NR]
1643644	221 Patrick Brems Dr.	221	Mr. + Mrs. Dooley	818-7380	09/09/89	12/15/89	12/18/89	97	DJLP
1643667	222 Patrick Brems Dr.	222	Mr. + Mrs. Gwynn	818-0016	09/09/89	12/15/89	12/18/89	97	DJLP
1643650	223 Patrick Brems Dr.	223	Mr. + Mrs. Lupo		09/09/89	12/22/89	01/08/90	104	BNP
1643657	224 Patrick Brems Dr.	224	Mr. + Mrs. Evans						BNP [NR]
1645435	201 S. Brems Ct.	201	Unoccupied						BGNP [NR]
0	202 S. Brems Ct.	202	Mr. + Mrs. Kickuth						[ND]
1643668	203 S. Brems Ct.	203	Mr. + Mrs. Self	934-8352	09/09/89				LP [NR]
1643664	204 S. Brems Ct.	204	Mr. + Mrs. Chapman	818-1865	09/09/89	12/14/89	12/27/89	96	LP
1643666	205 S. Brems Ct.	205	Mr. + Mrs. Robin Jones						BNP [NR]
1643645	206 S. Brems Ct.	206	Mr. + Mrs. John Smith						BNP [NR]
1643642	207 S. Brems Ct.	207	Mr. + Mrs. Wiktor	818-9866	09/09/89	12/15/89	12/18/89	97	ADEJLP
1643653	207 S. Brems Ct.	207	Mr. + Mrs. Wiktor	818-9866	09/09/89	12/15/89	12/18/89	97	ADEJLP
1643646	208 S. Brems Ct.	208	Mr. + Mrs. Rafael Pabon	934-7075	09/09/89	12/09/89	12/13/89	91	LP
1643643	209 S. Brems Ct.	209	Mr. + Mrs. Peckinpough	934-1109	09/09/89	12/15/89	12/18/89	97	DJKP
1643672	210 S. Brems Ct.	210	Powell						BNP [NR]
1647468	211 S. Brems Ct.	211	Unoccupied						BGNP [NR]
1643654	212 S. Brems Ct.	212	Mr. + Mrs. Vunovich	327-5417	09/09/89				LP [NR]

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Holmdel Army Housing Area**  
**Holmdel, New Jersey 07733**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (201)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645685	201 Telegraph Rd.	201	Mr. + Mrs. Fortune	264-2367	09/11/89	12/12/89	12/18/89	92	LP
1643641	202 Telegraph Rd.	202	Mr. + Mrs. Cruz-Roman	739-0544	09/11/89	12/11/89	12/18/89	91	LP
1643238	203 Telegraph Rd.	203	Mr. + Mrs. Glenn Davis	264-5560	09/11/89	12/15/89	12/18/89	95	DJLP
1647467	204 Telegraph Rd.	204	Mr. + Mrs. D'Angelo	264-2943	09/11/89	12/11/89	12/27/89	97	LP
1643662	205 Telegraph Rd.	205	Mr. James Hayes						NP [NR]
1643240	206 Telegraph Rd.	206	Mr. + Mrs. Marzella	264-9183	09/11/89	12/19/89	12/27/89	99	AKP
1643244	206 Telegraph Rd.	206	Mr. + Mrs. Marzella	264-9183	09/11/89	12/19/89	12/27/89	99	AKP
1643640	207 Telegraph Rd.	207	Mr. + Mrs. Weber	264-2358	09/11/89	12/01/89	12/04/89	81	LP
1645884	208 Telegraph Rd.	208	Unoccupied						BGNP [NR]
1643242	209 Telegraph Rd.	209	Mr. + Mrs. Wits	739-4397	09/11/89	12/15/89	12/18/89	95	DEJLP
1643247	210 Telegraph Rd.	210	Mr. + Mrs. Flemm	739-6864	09/11/89	02/16/90	02/23/90	158	LP
1643241	211 Telegraph Rd.	211	Mr. + Mrs. Munoz-Moreno	739-3489	09/11/89	12/11/89	12/18/89	91	LP
1643649	212 Telegraph Rd.	212	Mr. + Mrs. Adams	888-0239	09/11/89	12/15/89	03/16/90		LP

<sup>a</sup>Key to Remarks:

- |  |   |   |
|--|---|---|
| <p>A Duplicates detectors</p> <p>B Detector placed by occupant of DEH</p> <p>C Starting date unknown</p> <p>D Ending date unknown</p> <p>E Detector received with no seal</p> <p>F No data sheet</p> <p>G Unoccupied house</p> | <p>H Exposure &lt; 90 days</p> <p>J Exact duration of exposure unknown; concentration estimated</p> <p>K Detector in bedroom</p> <p>L Detector in living room</p> <p>M Detector in kitchen</p> <p>N Detector location unknown</p> | <p>P Capehart home</p> <p>Q MCA home</p> <p>R Duplex (one-story) home</p> <p>S Duplex (multistory) home</p> <p>T Apartment building</p> <p>U Below detection limit</p> <p>[ND] No data</p> <p>[NR] Not returned</p> |
|--|---|---|

**Livingston Army Housing Area  
East Hanover Twp., New Jersey 07936  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (201)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643670	201 Hornung Ct.	01	Joanne Lindahl	428-9487	09/12/89	12/05/89	12/22/89	84	BNP [NR]
1643243	202 Hornung Ct.	02	Mr. + Mrs. Smith	503-0705	09/12/89	12/19/89	12/27/89	98	HL P
1645434	203 Hornung Ct.	03	Mr. + Mrs. Phillips	884-0567	09/12/89	02/06/90	02/09/90	147	LP
1645439	204 Hornung Ct.	04	Mr. + Mrs. Crews						DELP
1643663	205 Hornung Ct.	05	Mr. + Mrs. Uriaga	515-3540	09/12/89				LP [NR]
1643675	206 Hornung Ct.	06	Mrs. Annette Nash	386-9178	09/12/89	12/13/89	12/18/89	92	LP
1645427	207 Hornung Ct.	07	Mr. + Mrs. Lewis	503-0741	09/12/89	12/19/89	12/27/89	98	LP
1645925	208 Hornung Ct.	08	Mr. + Mrs. Moseley	887-4613	09/12/89	12/19/89	12/27/89	98	LP
1645900	209 Hornung Ct.	09	Mr. + Mrs. Rodriguez	386-9556	09/12/89				LP [NR]
1643661	210 Hornung Ct.	10	Lyle Daniels	887-9370	09/12/89				BNP [NR]
1645898	211 Hornung Ct.	11	Mr. + Mrs. Timothy Grix	884-8890	09/12/89				LP [NR]
1645926	212 Hornung Ct.	12	Mr. + Mrs. Gutierrez						LP [NR]
1645908	213 Hornung Ct.	13	Aaron Hall	503-1493	09/12/89	12/12/89	12/18/89	91	BNP [NR]
1645423	214 Hornung Ct.	14	Mr. + Mrs. Jordan	503-0241	09/12/89	12/12/89	12/27/89	91	LP
1645426	215 Hornung Ct.	15	Mr. + Mrs. Kenific						KP
1643245	216 Hornung Ct.	16	Unoccupied						GNP [NR]
1643246	217 Hornung Ct.	17	Edward Porter	884-0390	09/12/89	02/06/90	02/12/90	147	BNP [NR]
1643674	218 Hornung Ct.	18	Mr. + Mrs. Diaz	884-0390	09/12/89	02/06/90	02/12/90	147	ALP
1643660	218 Hornung Ct.	18	Mr. + Mrs. Diaz						ALP
1645902	219 Hornung Ct.	19	Edward Outgley						BNP [NR]
1645923	220 Hornung Ct.	20	Mr. + Mrs. Smith, Jr.	428-1078	09/12/89	12/19/89	12/27/89	98	LP
1645432	221 Hornung Ct.	21	Mr. + Mrs. Burton	515-0846	09/12/89	12/22/89	12/27/89	101	ALP [NR]
1645920	221 Hornung Ct.	21	Mr. + Mrs. Burton	515-0846	09/12/89	12/22/89	12/27/89	101	AELP
1645922	222 Hornung Ct.	22	Mr. + Mrs. J. Latour	503-0904	09/12/89	01/13/90	01/16/90	123	ADJLP

**Key to Remarks:**

- A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house

- H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom  
L Detector in living room  
M Detector in kitchen  
N Detector location unknown

- P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

Livingston Army Housing Area (Cont'd)  
East Hanover Twp., New Jersey 07936  
Indoor Radon Monitoring Conditions

Detector No.	Address	Unit No.	Occupants	Telephone No. (201)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645911	222 Hornung Ct.	22	Mr. + Mrs. J. Labur	503-0904	09/12/89	01/12/90	01/15/90	122	ADJLP
1645919	223 Hornung Ct.	23	Mr. + Mrs. McCain	884-1530	09/12/89	12/31/89	01/02/90	110	DJMP
1645431	224 Hornung Ct.	24	Mr. + Mrs. Chas. Jandik	884-1584	09/12/89	12/26/89	01/02/90	105	KP
1645428	225 Hornung Ct.	25	Mr. + Mrs. Ronald Silas	887-6478	09/12/89				LP [NR]
1645928	226 Hornung Ct.	26	Mr. + Mrs. L.C. Lane	884-4904	09/12/89	12/12/89	12/18/89	91	CDJLP
1645430	227 Hornung Ct.	27	Mr. + Mrs. Grunert	503-1363	09/12/89	12/22/89	12/27/89	101	LP
1645910	228 Hornung Ct.	28	Unoccupied						BGNP [NR]
1643669	229 Hornung Ct.	29	Charles Shores		09/13/89	01/25/90	01/29/90	134	BENP
1647473	230 Hornung Ct.	30	Mr. + Mrs. Fitzpatrick	386-1338	09/12/89	12/15/89	12/18/89	94	DEJMP
1645918	231 Hornung Ct.	31	Mr. + Mrs. Podlaski	428-5193	09/12/89	12/13/89	12/22/89	92	LP
1645422	232 Hornung Ct.	32	Mr. + Mrs. Walter Hill	515-0133	09/12/89	12/16/89	12/27/89	95	LP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Old Bridge Army Housing Area  
Old Bridge, New Jersey 08857  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (201)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643237	201 Jake Brown Rd.	201	Mr. + Mrs. Talbert	679-1780	09/11/89	01/14/90	02/27/90	125	ENP
1645424	202 Jake Brown Rd.	202	Unoccupied						BGNP [NR]
1645906	203 Jake Brown Rd.	203	Mr. + Mrs. Jerry Harris	679-7747	09/13/89	12/17/89	12/27/89	95	LP
1645904	204 Jake Brown Rd.	204	Mrs. Ella Stewart	679-1748	09/13/89	12/24/89	12/27/89	102	DEJ KP
1643638	205 Jake Brown Rd.	205	Mrs. Lillie Battle	679-6166	09/11/89				ALP [NR]
1643656	205 Jake Brown Rd.	205	Mrs. Lillie Battle	679-6166	09/11/89				ALP [NR]
1645929	206 Jake Brown Rd.	206	Mrs. Casserine Brown	679-9127	09/13/89				NP [NR]
1643639	207 Jake Brown Rd.	207	Mr. + Mrs. Kennell	679-7264	09/11/89	01/12/90	01/15/90	123	DJLP
1645429	208 Jake Brown Rd.	208	Mr. + Mrs. Scarnesi	679-6039	09/13/89				LP [NR]
1643239	209 Jake Brown Rd.	209	Mr. + Mrs. Munkacsy	679-4153	09/11/89	12/15/89	12/18/89	95	DJ KP
1643236	210 Jake Brown Rd.	210	Mr. + Mrs. Johnson	679-8515	09/11/89	12/11/89	12/18/89	91	KP
1643655	211 Jake Brown Rd.	211	Mr. + Mrs. Tatro	679-9490	09/11/89	12/16/89	12/19/89	96	DJLP
1645438	212 Jake Brown Rd.	212	Mr. + Mrs. Houde	679-0283	09/13/89	03/04/90	03/07/90	172	DJLP

**Key to Remarks:**

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Dry Hill Army Housing Area  
Watertown, New York 13601  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (315)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641567	239 Coughlin Dr.	239	E3 Scott		09/14/89	10/23/89	10/25/89	39	AHKP
1643443	239 Coughlin Dr.	239	E3 Scott		09/14/89	10/23/89	10/25/89	39	AHKP
1643439	240 Coughlin Dr.	240	E7 Couch	788-6063	09/14/89	12/14/89	12/18/89	91	KP
1641530	241 Coughlin Dr.	241	E8 Merryman	782-0724	09/14/89	12/30/89	01/05/90	107	KP
1643452	235 Delavan Ave.	235	E5 Brown	782-2090	09/14/89	01/12/90	01/15/90	120	DEJKP
1643450	236 Delavan Ave.	236	SGT Peala	785-1020	09/14/89	12/24/89	01/05/90	101	KP
0	237 Delavan Ave.	237							[ND]
1641564	238 Delavan Ave.	238	E5 McGill	785-1915	09/14/89	12/13/89	12/18/89	90	KP
1643413	242 Delavan Ave.	242	E5 Patton	782-4583	09/14/89	12/31/89	01/02/90	108	DEJKP
1641542	243 Delavan Ave.	243	MSG Yates	788-3739	09/14/89	02/05/90	02/09/90	144	KP
1641561	232 Rathburn Dr.	232	E5 Davis	785-9404	09/14/89				KP [NR]
1643444	233 Rathburn Dr.	233	E6 Rowley	782-1907	09/14/89	12/21/89	12/27/89	98	EKP
1641528	234 Rathburn Dr.	234	SGT Morrison	782-4984	09/14/89				KP [NR]
1641554	255 Rathburn Dr.	255	SGJ Ramsey	788-2322	09/14/89	11/17/89	11/20/89	64	DHJKP
0	257 Rathburn Dr.	257							[ND]
1641524	258 Rathburn Dr.	258	SP4 Fogarty		09/14/89	12/25/89	12/27/89	102	DJKP
1641563	244 Reardon Ave.	244	E4 Cummings	785-1091	09/14/89				KP [NR]
0	246 Reardon Ave.	245							[ND]
1643445	246 Reardon Ave.	246	SSG Everts	788-0328	09/14/89	12/14/89	01/02/90	91	KP
0	247 Reardon Ave.	247							[ND]
1641565	248 Reardon Ave.	248	E8 Burt	788-9774	09/14/89	12/19/89	12/22/89	96	EKP
1643420	249 Reardon Ave.	249	E5 Morris	782-2172	09/14/89	12/15/89	12/19/89	92	KP
1641562	250 Reardon Ave.	250	E6 Sipla	782-6873	09/14/89	12/14/89	12/18/89	91	KP
1643422	251 Reardon Ave.	251	SP4 Jenks	785-9427	09/14/89	12/12/89	12/18/89	89	KPU

**<sup>a</sup>Key to Remarks:**

- |   |  |  |
|---|--|--|
| <p>A Duplicate detectors<br/>B Detector placed by occupant of DEH<br/>C Starting date unknown<br/>D Ending date unknown<br/>E Detector received with no seal<br/>F No data sheet<br/>G Unoccupied house</p> | <p>H Exposure &lt; 90 days<br/>J Exact duration of exposure unknown; concentration estimated<br/>K Detector in bedroom<br/>L Detector in living room<br/>M Detector in kitchen<br/>N Detector location unknown</p> | <p>P Capehart home<br/>Q MCA home<br/>R Duplex (one-story) home<br/>S Duplex (multistory) home<br/>T Apartment building<br/>U Below detection limit<br/>[ND] No data<br/>[NR] Not returned</p> |
|---|--|--|

Dry HM Army Housing Area (Cont'd)  
Watertown, New York 13601  
Indoor Radon Monitoring Conditions

Detector No.	Address	Unit No.	Occupants	Telephone No. (315)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643419	252 Reardon Ave.	252	A5 Ramirez	785-0174	09/14/89	12/20/89	01/05/90	97	K P
1643424	253 Reardon Ave.	253	SFC Mullins	785-9510	09/14/89	12/14/89	12/18/89	91	K P U
1643421	254 Reardon Ave.	254	E5 Conner	788-5025	09/14/89	12/15/89	12/20/89	92	K P
1643446	256 Reardon Ave.	256	E8 Singleton		09/14/89	01/04/90	01/08/90	112	K P

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Manhattan Beach Army Housing Area**  
**Brooklyn, New York 11235**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (718)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645462	115A Quentin St.	115A	Mr. + Mrs. Moran		09/07/89	01/16/90	01/22/90	131	BNS
1643183	115B Quentin St.	115B	Mr. + Mrs. Negron	769-4527	09/06/89				LS [NR]
1645459	116A Quentin St.	116A	Mr. + Mrs. Al Sosa	891-0446	09/06/89	12/05/89	12/08/90	90	DLSU
1648220	116B Quentin St.	116B							BNS [NR]
1645482	119A Quentin St.	119A	Sanchez		09/06/89	12/05/89	12/08/89	90	BNS [NR]
1645443	119B Quentin St.	119B	Mr. + Mrs. Williams		09/06/89	12/06/89	12/12/89	91	CDJLSU
1648172	120A Quentin St.	120A	Mr. + Mrs. Luxon	648-2523	09/06/89	12/06/89	12/12/89	91	LS
1645475	120B Quentin St.	120B	Mr. + Mrs. Williams	743-6327	09/06/89	12/13/89	12/19/89	98	LSU
1648225	121A Quentin St.	121A	Mr. + Mrs. Quintones	648-7462	09/06/89				LS [NR]
1645476	121B Quentin St.	121B	Gleicher	891-8611	10/16/89				BNS [NR]
1648217	122A Quentin St.	122A	Unoccupied		09/06/89				GLS [NR]
0	122B Quentin St.	122B	Mr. + Mrs. Navaril						[ND]
1645464	125A Quentin St.	125A	Mr. + Mrs. Benbenek	743-9262	09/06/89				LS [NR]
1645473	125B Quentin St.	125B	Mr. + Mrs. McLaughlin	646-7040	09/06/89	12/09/89	12/12/89	94	DEJLS
1648219	126A Quentin St.	126A	Unoccupied		09/06/89				GLS [NR]
1648145	126B Quentin St.	126B	Mr. + Mrs. Lounder	743-7442	09/06/89				LS [NR]
1648213	129A Quentin St.	129A	Mr. + Mrs. Harris	646-8219	09/06/89				LS [NR]
1645471	129B Quentin St.	129B	Mr. + Mrs. Adams	646-4381	09/06/89	12/09/89	12/12/89	94	KS
1645452	130A Quentin St.	130A	Vellazquez						BNS [NR]
1648166	130B Quentin St.	130B	Mr. + Mrs. Matos	648-8591	09/06/89	12/05/89	12/08/89	90	DJLSU
1645472	131A Quentin St.	131A	Unoccupied		09/06/89				GLS [NR]
1645461	131B Quentin St.	131B	Mr. + Mrs. Herrera	646-3111	09/06/89	12/06/89	01/02/90	91	LS
0	132A Quentin St.	132A	Mr. + Mrs. Steyer						[ND]
1645450	132B Quentin St.	132B	Lee						BNS [NR]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Manhattan Beach Army Housing Area (Cont'd)**  
**Brooklyn, New York 11235**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (718)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645445	133A Quentin St.	133A	Mr. + Mrs. Ruchella	891-5302	09/06/89	12/16/89	12/27/89	101	LS
1648140	133B Quentin St.	133B	Mr. + Mrs. Thompson	646-4064	09/06/89	12/14/89	12/18/89	99	LS
1648168	134A Quentin St.	134A	Francis	891-0734	09/25/89	11/25/89	12/06/89	61	BHNSU
1645486	134B Quentin St.	134B	Santiago						BNS[NR]
1645444	135A Quentin St.	135A	Mr. + Mrs. Bell	891-9504	09/06/89				LS[NR]
1645446	135B Quentin St.	135B	Unoccupied		09/06/89				GLS[NR]
1648139	136A Quentin St.	136A	Mr. + Mrs. Guy Bejin	646-0318	09/06/89				LS[NR]
1648215	136B Quentin St.	136B	Mr. + Mrs. Santana	891-2061	09/06/89				LS[NR]
1648214	139 Quentin St.	139	Peterson						BNS[NR]
1648138	140 Quentin St.	140	MAJ Reid	648-6654	09/18/89	12/17/89	12/27/89	90	AMS
1648149	140 Quentin St.	140	MAJ Reid	648-6654	09/18/89	12/17/89	12/27/89	90	AMSU
1645442	141 Quentin St.	141	Mr. + Mrs. Jones	891-0116	09/06/89				MS[NR]
1643182	142 Quentin St.	142	MAJ + Mrs. Toler	743-3351	09/06/89	12/28/89	01/02/90	113	LSU
1648155	145 Quentin St.	145	Unoccupied		09/06/89				GKS[NR]
1645484	146 Quentin St.	146	Mr. + Mrs. McDonald	934-1113	09/06/89	02/06/90	02/12/90	153	LS
1648222	147 Quentin St.	147	Mr. + Mrs. Cruzado	743-2423	09/06/89	02/19/90	03/02/90	166	LS
1648216	148 Quentin St.	148	MAJ + Mrs. Kaiman	769-7611	09/06/89	12/08/89	12/18/89	93	LSU
1645470	149 Quentin St.	149	Taff						ANS[NR]
1645460	149 Quentin St.	149	Taff						ANS[NR]
1648167	150 Quentin St.	150	MAJ + Mrs. Behn	332-5645	09/06/89	02/24/90	03/02/90	171	MS
1648221	151 Quentin St.	151	Mr. + Mrs. Austin	646-8672	09/06/89	11/20/89	12/04/89	75	HLS
1648171	152 Quentin St.	152	MAJ + Mrs. Wilson	646-0371	09/06/89				LS[NR]
1648182	155 Quentin St.	155	Melson						LS[NR]
1648164	156 Quentin St.	156	Mr. + Mrs. Diaz	891-4297	09/06/89				LS[NR]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Manhattan Beech Army Housing Area (Cont'd)**  
**Brooklyn, New York 11235**  
**Indoor Radon Monitoring Conditions**

Detector No	Address	Unit No.	Occupants	Telephone No. (718)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1648158	157 Quentin St.	157	Mr. + Mrs. Senquiz	646-7615	09/06/89	12/18/89	01/08/90	102	LS [NR]
1645483	158 Quentin St.	158	MAJ Manibonson		09/07/89				DJNSU
1645485	162A Quentin St.	162A	Roberson						ABNS [NR]
1645449	162A Quentin St.	162A	Roberson						ABNS [NR]
1648153	162B Quentin St.	162B	Mr. + Mrs. Rivera	769-6019	09/06/89	12/06/89	12/12/89	91	LS
1648146	164A Quentin St.	164A	Robles						BNS [NR]
1645458	164B Quentin St.	164B	Mr. + Mrs. Gates	646-8424	09/06/89	01/02/90	01/05/90	118	DEJLS
1648159	166A Quentin St.	166A	Mr. + Mrs. Gaddy	769-4201	09/06/89	02/07/90	02/19/90	154	KSU
1648226	166B Quentin St.	166B	Mr. + Mrs. Smart	646-5322	09/06/89				LS [NR]
1648174	170A Quentin St.	170A	Hernandez						BNS [NR]
1648165	170B Quentin St.	170B	Mr. + Mrs. Doney	945-5134	09/06/89	12/04/89	12/07/89	89	DJLS
1648223	173A Quentin St.	173A	Unoccupied		09/06/89				GLS [NR]
1645478	173B Quentin St.	173B	Mr. + Mrs. Sergeant	934-6080	09/06/89				LS [NR]
1645448	174A Quentin St.	174A	Unoccupied		09/06/89				GLS [NR]
1645447	174B Quentin St.	174B	Mr. + Mrs. Guadalupe	646-1787	09/06/89	12/05/89	12/08/89	90	DLS
1648152	175A Quentin St.	175A	Unoccupied		09/06/89				AGLS [NR]
1648160	175A Quentin St.	175A	Unoccupied		09/06/89				AGLS [NR]
1648161	175B Quentin St.	175B	Mr. + Mrs. Halvorsen	934-0991	09/06/89	12/06/89	12/08/89	91	LS
1648154	176A Quentin St.	176A	Unoccupied		09/06/89				GLS [NR]
1645451	176B Quentin St.	176B	Unoccupied		09/06/89				GLS [NR]
1643181	177A Quentin St.	177A	Roach/						LS [NR]
1648173	177B Quentin St.	177B	Brown		10/29/89	02/19/90	02/26/90	113	BNS
1648170	178A Quentin St.	178A	Mr. + Mrs. Starkiewicz	743-0607	09/06/89	12/26/89	01/25/90	113	LSU
1645463	178B Quentin St.	178B	Kintchen						BNS [NR]
1648163	181A Quentin St.	181A	Mr. + Mrs. Valentin	891-6530	09/06/89	12/09/89	12/12/89	94	DJLSU
1648224	181B Quentin St.	181B	Vasquez						BNS [NR]
1648137	182A Quentin St.	182A	Mr. + Mrs. Gonzalez	891-1051	09/06/89	02/06/90	02/12/90	153	LSU
1648157	182B Quentin St.	182B	Unoccupied		09/06/89				GLS [NR]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Rocky Point Army Housing Area**  
**Rocky Point, New York 11786**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (516)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645453	01 Defense Hill Rd.	01	Mr. + Mrs. Shultz	929-3941	09/07/89	12/06/89	12/12/89	90	LP [NR]
1645474	02 Defense Hill Rd.	02	Mr. + Mrs. Esposito	929-4498	09/07/89	12/06/89	12/12/89	90	LP
1645487	03 Defense Hill Rd.	03	Unoccupied	929-6373	09/07/89	12/07/89	12/12/89	91	GKP [NR]
1645468	04 Defense Hill Rd.	04	Mr. + Mrs. Zingery	929-6373	09/07/89	12/07/89	12/12/89	91	LP
1643184	05 Defense Hill Rd.	05	Mr. + Mrs. Perry	929-3668	09/07/89	12/10/89	12/18/89	94	ALP
1645465	05 Defense Hill Rd.	05	Mr. + Mrs. Perry	929-3668	09/07/89	12/10/89	12/18/89	94	ALP
1645481	06 Defense Hill Rd.	06	Mr. + Mrs. Adams	929-4569	09/07/89	12/09/89	12/12/89	93	DJLP
1645454	07 Defense Hill Rd.	07	Mr. + Mrs. O'Brien	929-6980	09/07/89	12/09/89	12/12/89	93	LP [NR]
1645469	08 Defense Hill Rd.	08	Mr. + Mrs. Chaiman	929-6537	09/07/89	12/18/89	12/27/89	102	KP
1645480	09 Defense Hill Rd.	09	Mr. + Mrs. Bowyer	929-5826	09/07/89	12/18/89	12/27/89	102	LP [NR]
1645456	10 Defense Hill Rd.	10	Mr. + Mrs. Johnson	929-4970	09/07/89	12/18/89	12/22/89	102	LP
1648148	11 Defense Hill Rd.	11	Mr. + Mrs. Pierce	929-5472	09/07/89	12/18/89	12/22/89	102	LP
1645467	12 Defense Hill Rd.	12	Mr. + Mrs. Oropaz	929-5820	09/07/89	02/07/90	02/14/90	153	LP
1648144	13 Defense Hill Rd.	13	Mr. + Mrs. Rickoff	929-3659	09/07/89	12/08/89	12/12/89	92	BNP [NR]
1645479	14 Defense Hill Rd.	14	Mr. + Mrs. Radlein	929-5697	09/07/89	12/08/89	12/12/89	92	KP
1645441	15 Defense Hill Rd.	15	Mr. + Mrs. Boltone	929-5812	09/07/89	12/08/89	12/22/89	92	BNP [NR]
1645466	16 Defense Hill Rd.	16	Mr. + Mrs. Delgado	929-6154	09/07/89	12/08/89	12/22/89	92	LP

<sup>a</sup>Key to Remarks:

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 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Spring Valley Army Housing Area**  
**Spring Valley, New York 10977**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (914)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645889	201 Grandview Ave.	201	Unoccupied		09/08/89	02/10/90	02/14/90	155	G K P
1645886	202 Grandview Ave.	202	Isaacs						BNP [NR]
1645873	203 Grandview Ave.	203	Mr. + Mrs. Harvey	354-2460	09/08/89	12/24/89	12/27/89	107	D J K P
1645888	204 Grandview Ave.	204	Mr. + Mrs. Wilsey	354-8034	09/08/89				K P [NR]
1647465	205 Grandview Ave.	205	Mr. + Mrs. Stukes	354-1159	09/09/89				A L P [NR]
1647469	205 Grandview Ave.	205	Mr. + Mrs. Stukes	354-1159	09/09/89	12/16/89	12/27/89	98	A L P
1647466	206 Grandview Ave.	206	Mr. + Mrs. Venzor	354-5195	09/09/89	12/10/89	12/18/89	92	L P
1645890	207 Grandview Ave.	207	Mr. + Mrs. Kushner	362-3157	09/09/89	01/09/90	01/12/90	122	D J L P
1645872	208 Grandview Ave.	208	Mr. + Mrs. Shock	362-1899	09/08/89	02/08/90	02/19/90	153	L P
1647470	209 Grandview Ave.	209	Mr. + Mrs. Morales		09/09/89	01/03/90	01/17/90	116	BNP U
1645870	210 Grandview Ave.	210	Mr. + Mrs. Carey	362-1848	09/08/89	02/09/90	02/23/90	154	N P
1647475	211 Grandview Ave.	211	Mr. + Mrs. Usen						BNP [NR]
1645863	212 Grandview Ave.	212	Mr. + Mrs. Perez	354-9851	09/09/89	02/08/90	02/19/90	152	L P

<sup>a</sup>Key to Remarks:

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 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Tappan Army Housing Area**  
**Tappan, New York 10983**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (914)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645857	423 Bogart Place	423	Unoccupied		09/08/89				GKP [NR]
1645477	424 Bogart Place	424	Mr. + Mrs. Ralph		09/08/89	12/08/89	12/27/89	91	LP [NR]
1645865	425 Bogart Place	425	Mr. + Mrs. Sienko	359-4958	09/08/89				LP [NR]
1645878	426 Bogart Place	426	Mr. + Mrs. Cronin	365-3325	09/08/89				LP [NR]
1645861	427 Bogart Place	427	Mr. + Mrs. Shoemaker	328-0092	09/08/89	12/08/89	01/02/90	91	LP
1645883	179 Greenbush Rd.	429	Mr. + Mrs. Roberts	365-2748	09/08/89	02/16/90	02/19/90	161	DJLP
1645866	185 Greenbush Rd.	430	Mr. + Mrs. Brown, Jr.	359-5274	09/08/89	12/11/89	12/18/89	94	LP
1645892	211 Greenbush Rd.	428	Stewart		10/16/89	02/09/90	02/19/90	116	BNP
0	401 Lafayette St.	401	Unoccupied						[ND]
1647476	402 Lafayette St.	402	Mr. + Mrs. Bates	365-3172	09/08/89	01/02/90	01/05/90	116	DJLP
1647472	403 Lafayette St.	403	Mr. + Mrs. Gonzales	365-2116	09/08/89	02/11/90	02/14/90	156	LP
1645880	404 Lafayette St.	404	Mr. + Mrs. Dobson	359-2788	09/08/89	02/16/90	02/19/90	161	DEJLP
1645874	405 Lafayette St.	405	Mann						KP [NR]
1645881	406 Lafayette St.	406	Mr. + Mrs. Edge	777-2637	09/08/89				LP [NR]
1645894	407 Lafayette St.	407	Mr. + Mrs. Gilbert	359-6113	09/08/89				NP [NR]
1645857	408 Lafayette St.	408	Mr. + Mrs. Jarvis	365-2898	09/08/89	12/10/89	12/18/89	93	LP
1645896	409 Lafayette St.	409	Walker						BNP [NR]
1645877	410 Lafayette St.	410	Mr. + Mrs. Butler	359-9475	09/08/89	12/08/89	12/12/89	91	LP
1645457	411 Lafayette St.	411	Stella						BNP [NR]
1645875	412 Lafayette St.	412	Mr. + Mrs. Parker	359-3364	09/08/89	12/18/89	12/27/89	101	DJLP
1645871	413 Lafayette St.	413	Unoccupied						ADGJKP
1648143	413 Lafayette St.	413	Unoccupied		09/08/89	01/07/90	01/10/90	121	ADGJKP
1648141	414 Lafayette St.	414	Abraham		09/08/89	01/07/90	01/10/90	121	BNP [NR]
1648142	415 Lafayette St.	415	Unoccupied		09/08/89				GKP [NR]

**Key to Remarks:**

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 C Starting date unknown  
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 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Tappan Army Housing Area (Cont'd)**  
**Tappan, New York 10983**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (914)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645858	416 Lafayette St.	416	Mr. + Mrs. Bari	365-7921	09/09/89	12/08/89	02/27/90	90	LP
1647474	417 Lafayette St.	417	Mr. + Mrs. Jeffers	365-0388	09/08/89	10/17/89	10/20/89	39	HLP
1645882	431 Lafayette St.	431	Mr. + Mrs. Weedon	359-8118	09/08/89	12/12/89	12/19/89	95	LP
1645893	432 Lafayette St.	432	Mr. + Mrs. Giannetti	359-8272	09/08/89	12/08/89	12/18/89	91	AKP
1645860	432 Lafayette St.	432	Mr. + Mrs. Gianetti	359-8272	09/08/89	12/08/89	12/18/89	91	AKP
1645876	433 Lafayette St.	433	Mrs. Delia Segarra	365-1191	09/08/89	12/24/89	12/27/89	107	DEJLP
1645879	434 Lafayette St.	434	Mr. + Mrs. Gangemi	365-0645	09/08/89	12/09/89	12/12/89	92	DEJLP
1645867	435 Lafayette St.	435	Mr. + Mrs. Cossel	365-2166	09/08/89	12/16/89	12/27/89	99	LP
1648169	436 Lafayette St.	436	Mr. + Mrs. Conde	359-6939	09/08/89	12/12/89	12/18/89	95	ALP
1648175	436 Lafayette St.	436	Mr. + Mrs. Conde	359-6939	09/08/89	12/12/89	12/18/89	95	ALP
1645869	215 Western Highway	421	Mr. + Mrs. Horn	365-0443	09/08/89	02/09/90	02/14/90	154	LP [NR]
1645859	221 Western Highway	420	Mr. + Mrs. Keane	365-1687	09/08/89	02/09/90	02/14/90	154	LP
1645868	418 Western Highway	418	Petera		09/08/89	02/19/90	02/27/90	140	BNP [NR]
1645895	419 Western Highway	419	Unoccupied		10/02/89	02/19/90	02/27/90	140	GKP [NR]
1645891	422 Western Highway	422	Walker						BNP

<sup>a</sup>Key to Remarks:

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- C Starting date unknown
- D Ending date unknown
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- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Corasopelle 71C Army Housing Area  
Robinson Twp., Pennsylvania 15108  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1436095	S118Q Ewings Mill Rd.	118	Rosalina Rodriguez	264-1666	09/13/89	12/15/89	12/18/89	93	DJKP
1436038	S119Q Ewings Mill Rd.	119	Tammy Van Kirk	264-7858	09/13/89				KP [NR]
1436033	S120Q Ewings Mill Rd.	120	Linda Bittay	264-5741	09/13/89	12/18/89	12/27/89	96	KP
1436195	S121Q Ewings Mill Rd.	121	Sandy Parrish	262-3421	09/13/89	12/15/89	12/18/89	93	DJKP
1436093	S122Q Ewings Mill Rd.	122	JoAnn Hudson	262-9418	09/13/89	12/15/89	12/18/89	93	DJKP
1436058	S123Q Ewings Mill Rd.	123	Paula Frazier	262-2172	09/14/89	01/01/90	01/03/90	109	CDJKP
1436037	S124Q Ewings Mill Rd.	124	Laurie Nichols	264-6209	09/13/89	12/24/89	12/27/89	102	ADJKP
1436001	S124Q Ewings Mill Rd.	124	Laurie Nichols	264-6209	09/13/89	12/24/89	12/27/89	102	ADJKP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Elizabeth Army Housing Area  
Elizabeth, Pennsylvania 15037  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643222	S73Q Route #4	73	Larry Howland	384-9321	09/12/89	12/19/89	12/22/89	98	KO
1643210	S74Q Route #4	74	Lorra Hess	384-2483	09/12/89	01/02/90	01/05/90	112	BCDJLP
0	S75Q Route #4	75							[ND]
1643189	S76Q Route #4	76	Maria P. Sisk	384-4693	09/12/89	12/12/89	01/12/90	91	KP
1643188	S77Q Route #4	77	Mr. + Mrs. Laduke	384-8104	09/12/89	12/13/89	12/18/89	92	KP
1643232	S78Q Route #4	78	Linda Hernandez	384-2999	09/12/89				KP [NR]
0	S79Q Route #4	79							[ND]
0	S80Q Route #4	80							[ND]
1643199	S81Q Route #4	81	Frank Heasley		09/12/89	12/12/89	12/18/89	91	EKP
1643211	S82Q Route #4	82	SGT Joseph Davis	384-0747	09/12/89	12/14/89	12/18/89	93	BLP
1643212	S83Q Route #4	83	PO Jefferey Edens	384-2824	09/12/89				BNP [NR]
1643086	S84Q Route #4	84			09/13/8	12/24/89	12/27/89	102	DJKP

<sup>a</sup>Key to Remarks:

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- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Elrama Army Housing Area**  
**Elrama, Pennsylvania 15332**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643214	S085Q Route #4	85	Betty Ferguson	348-7725	09/12/89	12/17/89	12/22/89	96	K P
1643200	S086Q Route #4	86	Lenny Rose	348-6108	09/12/89	12/12/89	12/18/89	91	E K P
1643229	S087Q Route #4	87	Mattie Henderson		09/12/89				K P [NR]
1643235	S088Q Route #4	88	Theresa Hutchinson	348-4721	09/12/89	11/29/89	12/04/89	78	H K P
1643228	S089Q Route #4	89			09/12/89	12/24/89	12/27/89	103	B D E J K P
1643195	S090Q Route #4	90	Gore		09/12/89				B N P [NR]
1643204	S091Q Route #4	91	Debbie Weyandt	348-6102	09/12/89	12/24/89	12/27/89	103	K P
1643223	S092Q Route #4	92	Roger L. Mantes	348-7876	09/12/89	02/05/90	02/14/90	146	B K P
1643226	S093Q Route #4	93	John Henderson	348-5004	09/12/89				K P [NR]
1643216	S094Q Route #4	94	Jose Figueroa	348-5475	09/12/89	12/12/89	12/18/89	91	B K P
1643187	S095Q Route #4	95	Allen Williams	348-4471	09/12/89	12/15/89	12/18/89	94	D J K P
1643230	S096Q Route #4	96	Mr. + Mrs. Kickenbacker	348-4809	09/12/89	12/12/89	12/13/89	91	B K P
1643201	S097Q Route #4	97	Johnnie Fullwood	348-7067	09/12/89	12/15/89	12/18/89	94	D J K P
1643223	S098Q Route #4	98	Rita Truist	348-8439	09/12/89	12/12/89	12/18/89	91	E K P
1643202	S099Q Route #4	99	Marianne Shue	348-7794	09/12/89	12/13/89	12/18/89	92	K P
1643219	S100Q Route #4	100	Christa Haggerty	348-7572	09/12/89	12/15/89	12/18/89	94	B D J K P

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH.  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Finleyville Army Housing Area  
Finleyville, Pennsylvania 15332  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643231	S101Q Route #4	101	David Cote		09/12/89	12/18/89	12/27/89	97	KQ
1643227	S102Q Route #4	102			09/12/89	12/15/89	12/18/89	94	DEJKP
1643220	S103Q Route #4	103	Ben Zarate	348-7223	09/12/89	12/31/89	01/02/90	110	DEJKP
1643185	S104Q Route #4	104	Cindy Ruifing	348-5150	09/12/89	12/12/89	12/27/89	91	KP
1643203	S105Q Route #4	105	Brenda Favalord	348-4513	09/12/89	12/24/89	12/27/89	103	DJKP
1643215	S106Q Route #4	106			09/13/89	01/05/90	01/08/90	114	CDEJKP
1643233	S107Q Route #4	107	Mr. + Mrs. Abin	348-4053	09/12/89	01/11/90	01/19/90	121	BELP
1643197	S108Q Route #4	108	Dale Ellis		09/12/89	01/05/90	01/08/90	115	BDEJKP
1643190	S109Q Route #4	109	Bobby Brown	348-5659	09/12/89	12/24/89	12/27/89	103	DEJKP
1643198	S110Q Route #4	110	Carla Stargen	348-4838	09/12/89				KP[NR]
1643221	S111Q Route #4	111							KP[NR]
1643194	S112Q Route #4	112	Can't read name	348-8471	09/12/89	12/09/89	12/12/89	88	BDEJKP

**aKey to Remarks:**

- |   |  |  |
|---|--|--|
| <p>A Duplicate detectors<br/>B Detector placed by occupant of DEH<br/>C Starting date unknown<br/>D Ending date unknown<br/>E Detector received with no seal<br/>F No data sheet<br/>G Unoccupied house</p> | <p>H Exposure &lt; 90 days<br/>J Exact duration of exposure unknown; concentration estimated<br/>K Detector in bedroom<br/>L Detector in living room<br/>M Detector in kitchen<br/>N Detector location unknown</p> | <p>P Capehart home<br/>Q MCA home<br/>R Duplex (one-story) home<br/>S Duplex (multistory) home<br/>T Apartment building<br/>U Below detection limit<br/>[ND] No data<br/>[NR] Not returned</p> |
|---|--|--|

**Hermine Army Housing Area  
Hermine, Pennsylvania 15642  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1436032	S57Q Mars Hill Rd.	57	Lori Dietz	446-1560	09/12/89	02/05/90	02/09/90	146	KP
1643208	S58Q Mars Hill Rd.	58	Bridget Folkes	446-1548	09/12/89	12/12/89	12/18/89	91	A E KP
1644339	S58Q Mars Hill Rd.	58	Bridget Folkes	446-1548	09/12/89	12/12/89	12/18/89	91	A KP
1644338	S59Q Mars Hill Rd.	59	Robin Baxter	446-1521	09/12/89	02/27/90	03/02/90	168	D J KP
1643196	S60Q Mars Hill Rd.	60	R. Brown	466-1742	09/12/89	01/05/90	01/08/90	115	DE J KP
1643191	S61Q Mars Hill Rd.	61	Marie Lettman	446-1292	09/12/89	12/16/89	12/27/89	95	KP
1643205	S62Q Mars Hill Rd.	62							[ND]
	S63Q Mars Hill Rd.	63	Fred Brown		09/12/89	02/23/90	03/02/90	164	BNP
1643224	S64Q Mars Hill Rd.	64	Linda Smith	446-0930	09/12/89	12/12/89	12/18/89	91	KP
1643206	S65Q Mars Hill Rd.	65	Cook		09/12/89	12/13/89	12/22/89	92	B KP
1643213	S66Q Mars Hill Rd.	66	Daniel Borawski	446-0609	09/12/89	12/10/89	12/18/89	89	BLP
1643192	S67Q Mars Hill Rd.	67	Keith Swackhammer	446-1416	09/12/89	12/27/89	01/02/90	106	KP
1643225	S68Q Mars Hill Rd.	68	Michel White	446-0981	09/12/89	12/13/89	12/18/89	92	KP
1643234	S69Q Mars Hill Rd.	69	James Moses	446-1628	09/12/89	02/05/90	02/12/90	146	KP
1643186	S70Q Mars Hill Rd.	70							[ND]
	S71Q Mars Hill Rd.	71	Laurie Miller	446-1004	09/12/89	01/14/90	02/05/90	124	KP
1643218	S72Q Mars Hill Rd.	72			09/12/89	01/03/90	01/08/90	113	BNP

**aKey to Remarks:**

- A** Duplicate detectors  
**B** Detector placed by occupant of DEH  
**C** Starting date unknown  
**D** Ending date unknown  
**E** Detector received with no seal  
**F** No data sheet  
**G** Unoccupied house  
**H** Exposure < 90 days  
**J** Exact duration of exposure unknown; concentration estimated  
**K** Detector in bedroom  
**L** Detector in living room  
**M** Detector in kitchen  
**N** Detector location unknown  
**P** Capehart home  
**Q** MCA home  
**R** Duplex (one-story) home  
**S** Duplex (multistory) home  
**T** Apartment building  
**U** Below detection limit  
**[ND]** No data  
**[NR]** Not returned

**Irwin Army Housing Area  
Irwin, Pennsylvania 15642  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1436083	S41Q Rd. 11	41	Terri Hardaway	744-3699	09/13/89	12/15/89	12/18/89	93	B D J K P
1436069	S42Q Rd. 11	42	Rhonda Custis	744-0024	09/13/89	12/13/89	12/18/89	91	A K P
1643193	S42Q Rd. 11	42	Rhonda Custis	744-0024	09/13/89	12/13/89	12/18/89	91	A K P
1436013	S43Q Rd. 11	43	Rodney Burch	744-0025	09/13/89	12/13/89	12/18/89	91	B K P
1436030	S44Q Rd. 11	44	Dottie Emerson	744-7472	09/13/89				K P [NR]
1436054	S45Q Rd. 11	45	Moreland		09/13/89	11/17/89	11/20/89	65	B H K P
1643217	S46Q Rd. 11	46	Lloyd		09/13/89				K P [NR]
1436011	S47Q Rd. 11	47	SFC Robert Feck		09/18/89	12/30/89	01/02/90	103	B D J K P
1436034	S48Q Rd. 11	48	Marty Kipp	744-4759	09/13/89				K P [NR]
0	S49Q Rd. 11	49							[ND]
1436050	S50Q Rd. 11	50	Michele Burns	744-9875	09/13/89	01/19/90	01/22/90	128	D J K P
1436066	S51Q Rd. 11	51	Laurie Swope	744-3448	09/13/89	12/15/89	12/18/89	93	B D E J K P
1436082	S52Q Rd. 11	52	Lisa Smith	744-3853	09/13/89				K P [NR]
1436194	S53Q Rd. 11	53	Carlton Thorne	744-9854	09/13/89	11/17/89	11/20/89	65	B D E H J K P
1436009	S54Q Rd. 11	54	Evelyn Pearl	744-9840	09/13/89	12/15/89	12/18/89	93	D J L P
0	S55Q Rd. 11	55							[ND]
0	S56Q Rd. 11	56							[ND]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Monroeville Army Housing Area  
Monroeville, Pennsylvania 15239  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1436202	S29Q Rd. 2	29	Olga Nives	325-4492	09/13/89	12/13/89	12/18/89	91	BKQ
1436056	S30Q Rd. 2	30			09/13/89	11/21/89	11/24/89	69	BHKKP
1436048	S31Q Rd. 2	31	Chris Rolands	733-3016					BKP [NR]
1436029	S32Q Rd. 2	32	Debbie Fackenstein	325-1734	09/13/89	12/15/89	12/18/89	93	DJKP
1436018	S33Q Rd. 2	33	Keith Parnell	325-3733	09/13/89	01/02/90	01/05/90	111	DJKP
1436006	S34Q Rd. 2	34	Brenda Miller	327-4185	09/13/89	12/13/89	12/27/89	91	BKP
1436201	S35Q Rd. 2	35	Over		09/13/89	12/12/89	12/18/89	90	BKP
1436092	S36Q Rd. 2	36	Pat Thomas	325-3482	09/13/89	12/15/89	12/18/89	93	BEKP
1436071	S37Q Rd. 2	37	Judy McNeil	327-6701	09/13/89	12/13/89	12/18/89	91	BKP
1436199	S38Q Rd. 2	38	Claudette Ayala	327-9360	09/13/89	12/12/89	12/27/89	90	BKP
1436043	S39Q Rd. 2	39	Nikita Jett	325-3158	09/13/89	12/13/89	01/10/90	91	BKP
1436064	S40Q Rd. 2	40	George Dewitt	327-8277	09/13/89	12/26/89	01/02/90	104	BKP

**Key to Remarks:**

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capchart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Rural Ridge Army Housing Area  
Rural Ridge, Pennsylvania 15024  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No (412)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1436196	S01Q Crawford Run Rd.	01	Emma Jasib	265-2904	09/13/89	12/13/89	12/27/89	91	BKP
1436012	S02Q Crawford Run Rd.	02	Cheryl Carlin	265-1643	09/13/89	11/08/89	11/13/89	56	BH KP
1436026	S03Q Crawford Run Rd.	03	Susan Silmore	265-2958	09/13/89	12/13/89	12/18/89	91	BKP
0	S04Q Crawford Run Rd.	04							[ND]
0	S05Q Crawford Run Rd.	05							[ND]
1436041	S06Q Crawford Run Rd.	06	Mr. + Mrs. Haslins	265-1074	09/13/89	12/14/89	12/22/89	92	KP
1436010	S07Q Crawford Run Rd.	07	Card Ray	265-3625	09/13/89				KP [NR]
1436003	S08Q Crawford Run Rd.	08	Dale Snyder	265-1570	09/13/89	02/19/90	02/22/90	159	DJKP
1436027	S09Q Crawford Run Rd.	09	Loma Bodley	265-3453	09/13/89	02/24/90	02/27/90	164	DEJKP
1436005	S10Q Crawford Run Rd.	10	Marjorie Kuzma	265-3364	09/13/89				KP [NR]
1436068	S11Q Crawford Run Rd.	11	Mr. + Mrs. Wakel	265-2321	09/13/89	12/12/89	12/18/89	90	KP
1436020	S12Q Crawford Run Rd.	12	Mr. + Mrs. Clinton	265-3008	09/13/89	02/07/90	03/13/90	147	KP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Davisville Army Housing Area**  
**North Kingston, Rhode Island 02852**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (401)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1647492	01 Navy	01	Cathy Piro	295-7561	09/09/89	01/29/90	02/08/90	142	ENS
1647491	02 Navy	02							BNS[NR]
1642341	03 Navy	03							BNS[NR]
1647489	04 Navy	04							BNS[NR]
1643075	05 Navy	05	George Moody	294-2038	09/10/89	12/17/89	12/22/89		BENS
1642327	06 Navy	06	Charles Barrett	295-2946	09/09/89	12/03/89	12/06/89	85	DJNS
1642336	07 Navy	7	Cheryl Walbridge	294-1397	09/09/89	12/15/89	12/18/89	97	DEJNS
1642328	08 Navy	08	Mary Schaffhouser	294-1322	09/09/89	01/19/90	01/22/90	132	NS
0	09 Navy	09							[ND]
1647478	10 Navy	10	Ronald Bream		09/09/89	12/09/89	12/12/89	91	NS
1642342	11 Navy	11	Zeirpora	294-6978	09/09/89				LS[NR]
1642348	12 Navy	12	Craig Witt	294-6238	09/09/89	02/09/90	02/19/90	153	ENS
0	13 Navy	13							[ND]
1642312	14 Navy	14	Arthur W. LeBeau	294-6304	09/09/89				NS[NR]
0	15 Navy	15							[ND]
1647483	16 Navy	16	William Jackson	295-5342	09/09/89	01/05/90	01/08/90	118	DJNS
1642340	17 Navy	17	Margaret Curry	295-2896	09/09/89	12/15/89	12/18/89	97	DEJLS
1647481	18 Navy	18	Gale Howlett	294-3566	09/09/89	12/13/89	12/18/89	95	NS
1642344	19 Navy	19	Mr. + Mrs. Miller		09/09/89				BLS[NR]
1642345	20 Navy	20	Jones	295-8412	09/09/89	01/29/90	02/05/90	142	EMS
1642346	22 Navy	22	Yung Hee Moore	294-2396	09/09/89	12/15/89	12/18/89	97	DJNS
1642339	23 Navy	23	Mr. + Mrs. Cutright	295-8685	09/09/89	12/12/89	12/18/89	94	MS
1642320	24 Navy	24	Terry Tegre	295-5039	09/09/89				NS[NR]
1642338	25 Navy	25	Jeff Krug	295-7872	09/09/89	12/28/89	01/08/90	110	EMS

**Key to Remarks:**

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 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Daviesville Army Housing Area (Cont'd)**  
**North Kingston, Rhode Island 02852**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (401)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1647485	27 Navy	27	John Kiefer	295-2214	09/09/89	12/07/89	12/12/89	89	MS
1642343	31 Navy	31	Franklin Walsh	295-5798	09/09/89	02/22/90	02/27/90	166	LS
1642337	33 Navy	33	Dennis Olson	295-5069	09/09/89				MS [NR]
1643080	35 Navy	35	Charles Downey		09/09/89	12/30/89	01/22/90	112	BENS
1642318	36 Navy	36	Rory Wint	294-4425	09/09/89	01/19/90	01/22/90	132	DJNS
1643074	37 Navy	37	Kathy Caudle	294-6727	09/09/89	12/14/89	12/18/89	96	MS
1642319	38 Navy	38	Leslie Bakker	295-2962	09/09/89	12/15/89	12/18/89	97	DJNS
1642334	39 Navy	39	Wm. Powell	294-2172	09/09/89	01/12/90	01/15/90	125	DJMS
0	40 Navy	40							[ND]
1642325	41 Navy	41	Pam LaVelle	295-7761	09/09/89	12/08/89	12/12/89	90	MS
1647484	42 Navy	42	Anthony Hansen	295-5636	09/09/89	12/10/89	12/18/89	92	LS
1647480	43 Navy	43	Virginia McCloud	294-9883	09/09/89	03/13/90	03/16/90		LS
1647482	44 Navy	44	Denise Turner	294-1121	09/09/89	12/09/89	12/13/89	91	NS
0	45 Navy	45							[ND]
1647477	46 Navy	46	Bergy Maydoney	294-3753	09/09/89	02/16/90	02/19/90	160	DJNS
1643073	47 Navy	47	Alan Bravelle	294-3436	09/09/89	12/15/89	12/18/89	97	DJKS
0	48 Navy	48							[ND]
1642349	49 Navy	49	Sylvia Rodriguez	295-5147	09/09/89	12/13/89	12/18/89	95	MS
1642331	50 Navy	50	Anthony Darby	295-5826	09/09/89	12/09/89	12/18/89	91	ANS
1642333	50 Navy	50	Anthony Darby	295-5826	09/09/89	12/09/89	12/18/89	91	ANS
1642351	51 Navy	51	Debra Lawrence	294-1639	09/09/89	01/07/90	01/15/90	120	MS
1642322	52 Navy	52	Elzira Rapote	294-6461	09/09/89	12/10/89	12/18/89	92	NS
1641199	53 Navy	53	Carmen Mejia	294-1499	09/09/89	12/31/89	01/05/90	113	MS
1647490	54 Navy	54	Lenny Sipple	295-7049	09/09/89				NS [NR]

**\*Key to Remarks:**

- A Duplicate detectors
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- C Starting date unknown
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- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capshart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Devilville Army Housing Area (Cont'd)**  
**North Kingston, Rhode Island 02852**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (401)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
0	55 Navy	55							(ND)
1647479	56 Navy	56	Lois Durie	295-7212	09/09/89	12/15/89	12/18/89	97	DJNS
1644319	57 Navy	57	Michael Schuck	294-1623	09/09/89	12/10/89	12/13/89	92	MS
1642329	58 Navy	58	Dan Vineski	295-1655	09/09/89	12/15/89	12/18/89	97	DEJNS
1647488	59 Navy	59	Christine Wiese	294-2591	09/09/89	02/02/90	02/05/90	146	DJLS
1642330	60 Navy	60	J. Gerald Alfred	294-6489	09/09/89	12/10/89	12/13/89	92	DJNS
0	61 Navy	61							(ND)
1641200	62 Navy	62	Yvonne Baetz	294-1439	09/09/89	12/09/89	12/13/89	91	NS
0	63 Navy	63							(ND)
1643069	64 Navy	64	Karen Donnie	294-1352	09/09/89	12/31/89	01/02/90	113	DEJNS
1642335	65 Navy	65	Beth Pendergast	294-6919	09/09/89	11/21/89	11/24/89	73	HLS
0	66 Navy	66							(ND)
1647486	67 Navy	67	Joseph Kielbasa	295-7706	09/16/89	12/16/89	12/22/89	91	BMS

**Key to Remarks:**

- A Duplicate detectors
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- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Slaterville Army Housing Area**  
**North Smithfield, Rhode Island 02895**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (401)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645798	1001 Pound Hill Rd.	01	Drue Michaud	769-4336	09/09/89	12/09/89	12/12/89	92	DEJKP
1642324	1002 Pound Hill Rd.	02	Deborah Dunn	765-4246	09/09/89	01/07/90	01/17/90	121	KP
0	1003 Pound Hill Rd.	03							[ND]
1643083	1004 Pound Hill Rd.	04	Sonja Filaronki		09/08/89	01/05/90	01/08/90	119	DJKP
1643088	1005 Pound Hill Rd.	05	Hans Hart	765-7953	09/08/89	12/15/89	12/18/89	98	DJKP
1643098	1006 Pound Hill Rd.	06	Allan Jacobson	769-4291	09/08/89	12/15/89	12/18/89	98	ADJKP
1643097	1006 Pound Hill Rd.	06	Allan Jacobson	169-4291	09/08/89	12/15/89	12/18/89	98	ADJKP
1643084	1007 Pound Hill Rd.	07	Robert Henschel	762-3766	09/08/89	12/08/89	12/13/89	91	AKP
1643077	1007 Pound Hill Rd.	07	Robert Henschel	762-3766	09/08/89	12/08/89	12/13/89	91	AKP
1643071	1008 Pound Hill Rd.	08	G. Jean Henderson	762-1965	09/08/89	12/15/89	12/18/89	98	DJKP
1644329	1009 Pound Hill Rd.	09	Stephen Haurahan	766-5821	09/11/89	12/15/89	12/18/89	95	BDEJNP
1643087	1010 Pound Hill Rd.	10	Suzanne Morit		09/08/89	12/24/89	12/27/89	107	DJKP
1643082	1011 Pound Hill Rd.	11	Daniel Kubala	766-4719	09/08/89				KP [NR]
1643096	1012 Pound Hill Rd.	12	Roger Richards	767-2627	09/08/89	12/08/89	12/13/89	91	EKP
1645777	1013 Pound Hill Rd.	13	Virginia Roberts	762-3191	09/08/89	12/09/89	12/12/89	92	ADJKP
1641185	1013 Pound Hill Rd.	13	Virginia Roberts	762-3191	09/08/89	12/09/89	12/12/89	92	ADJKP
1462326	1014 Pound Hill Rd.	14	Paul Garsau	762-0983	09/08/89	12/16/89	12/19/89	99	NP
1643100	1015 Pound Hill Rd.	15	Anthony M. Mota	765-4859	09/21/89	12/31/89	01/05/90	101	BNP
1643076	1016 Pound Hill Rd.	16	Darlene Elfer	765-7253	09/08/89	12/09/89	12/12/89	92	DJKP

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Manassas Army Housing Area  
Manassas, Virginia 22111  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (703)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
0	7801 Arden Rd.	1							[ND]
1647554	7801 Arden Rd.	2	Meade	791-2766	09/11/89	11/21/89	11/24/89	71	HKQ
0	7801 Arden Rd.	3							[ND]
0	7801 Arden Rd.	4							[ND]
1643681	7801 Arden Rd.	5	Prew	791-3138	09/11/89	12/24/89	12/27/89	104	ADJKQ
1643689	7801 Arden Rd.	5	Prew	791-3138	09/11/89	12/24/89	12/27/89	104	ADJKQ
0	7801 Arden Rd.	6							[ND]
1643691	7801 Arden Rd.	7	Meloy		09/11/89				[NR]
1647545	7801 Arden Rd.	8	Julia Brown	791-5364	09/11/89	12/11/89	12/16/89	91	KP
1643684	7801 Arden Rd.	9	Jenkins	791-4296	09/11/89				[NR]

**<sup>a</sup>Key to Remarks:**

- |   |  |  |
|---|--|--|
| <p>A Duplicate detectors<br/>B Detector placed by occupant of DEH<br/>C Starting date unknown<br/>D Ending date unknown<br/>E Detector received with no seal<br/>F No data sheet<br/>G Unoccupied house</p> | <p>H Exposure &lt; 90 days<br/>J Exact duration of exposure unknown; concentration estimated<br/>K Detector in bedroom<br/>L Detector in living room<br/>M Detector in kitchen<br/>N Detector location unknown</p> | <p>P Capehart home<br/>Q MCA home<br/>R Duplex (one-story) home<br/>S Duplex (multistory) home<br/>T Apartment building<br/>U Below detection limit<br/>[ND] No data<br/>[NR] Not returned</p> |
|---|--|--|

**Patrick Henry Army Housing Area**  
**Newport News, Virginia 23602**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (804)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1647541	Unit #01	1	Kopitchak	874-1862	09/09/89	12/14/89	02/01/90	96	K P
0	Unit #02	2							[ND]
1647558	Unit #03	3	Garza	872-0990	09/09/89	12/14/89	02/01/90	96	A K P
1647561	Unit #03	3	Garza	872-0990	09/09/89				A K P
1647562	Unit #04	4	Mark Farley	877-9999	09/09/89				K P [NR]
0	Unit #05	5							[ND]
1647564	Unit #06	6	Fletcher	875-9610	09/09/89				K P [NR]
1647567	Unit #07	7	John Kon	875-0629	09/09/89	12/14/89	02/01/90	96	K P
0	Unit #08	8							[ND]
1647557	Unit #09	9	Martin Hamner	886-0679	09/09/89	12/11/89	12/18/89	93	K P
1647556	Unit #10	10	Todd	886-1142	09/09/89				K P [NR]
0	Unit #11	11							[ND]
0	Unit #12	12							[ND]
0	Unit #13	13							[ND]
1647555	Unit #14	14	Dunham	874-6635	09/09/89	12/14/89	02/01/90	96	K P

**\*Key to Remarks:**

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capsule home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Woodbridge Army Housing Area**  
**Woodbridge, Virginia 22191**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (703)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1647566	14000 Dawson Beach Rd.		Long	494-0258	09/11/89	01/28/90	02/03/90	139	AKT
1643690	14000 Dawson Beach Rd.		Long	494-0258	09/12/89	01/28/90	02/03/90	138	AKT
1647563	14002 Dawson Beach Rd.		Croskey	497-0102	09/11/89				LT[NR]
1647559	14004 Dawson Beach Rd.		Herbert	494-0154	09/12/89	01/28/90	02/03/90	138	LT
1643682	14006 Dawson Beach Rd.		Moffett	490-8215	09/12/89	02/26/90	03/07/90	167	ELT
1647547	14008 Dawson Beach Rd.		A. L. Coll	490-8865	09/12/89	01/28/90	02/03/90	138	KT
1647544	14010 Dawson Beach Rd.		Wiggins	491-2976	09/11/89	12/07/89	12/12/89	87	KT
1647570	14011 Dawson Beach Rd.		Matthew Renkin	590-8004	10/07/89				KR[NR]
1644110	14012 Dawson Beach Rd.		Dale Marlon	664-3876	10/07/89	01/02/90	01/08/90	87	BLT
1644095	14013 Dawson Beach Rd.		Florinda Curry	491-8471	10/07/89	01/26/90	01/29/90	111	DEJKR
0	14014 Dawson Beach Rd.								[ND]

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Midway Army Housing Area**  
**Kent, Washington 98032**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (206)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645136	m-01 Avenue B	m-1	Allen Magnis	878-3751	09/05/89	12/05/89	12/18/89	91	KP [NR]
1645110	m-02 Avenue B	m-2	Howard Reese	878-1813	09/05/89	12/05/89	12/18/89	96	KP
1645112	m-03 Avenue B	m-3	Randy Duff	870-1171	09/05/89	12/05/89	12/18/89	91	KP
1645135	m-04 Avenue B	m-4	Pio Samson	824-7243	09/05/89	12/05/89	12/08/89	91	KP
1645126	m-05 Avenue B	m-5	Kenneth Perry	870-1538	09/05/89	12/09/89	12/12/89	95	ADEJKP
1645139	m-05 Avenue B	m-5	Kenneth Perry	870-1538	09/05/89	12/09/89	12/12/89	95	ADEJKP
1645109	m-06 Avenue B	m-6	St. Jacques	824-5795	09/05/89	12/04/89	12/08/89	90	KP [NR]
1644012	m-07 Avenue B	m-7	Brian Money	878-5306	09/05/89	12/04/89	12/08/89	90	KP
1645119	m-08 S. 240th	m-8	Gingres	824-1443	09/05/89	12/13/89	12/18/89	99	KP
1644016	m-09 S. 240th	m-9	Larry Mitchell	878-0299	09/05/89	12/07/89	12/12/89	93	A EKP
1644015	m-09 S. 240th	m-9	Larry Mitchell	878-0299	09/05/89	12/07/89	12/12/89	93	A EKP
1645085	m-10 Avenue B	m-10	Mary White	878-2696	09/15/89	12/15/89	12/27/89	91	KP
1645125	m-11 Avenue B	m-11	Smith	878-2292	09/05/89	12/05/89	01/02/90	91	KP [NR]
1645116	m-12 Avenue B	m-12	Alinea	824-3051	09/05/89	12/05/89	12/12/89	92	KP [NR]
1645129	m-13 Avenue B	m-13	Greber	878-3046	09/05/89	12/06/89	12/12/89	92	KP
1645143	m-14 Avenue B	m-14	Michael Ellis	878-3046	09/05/89	12/06/89	12/12/89	92	KP
1645141	m-15 Avenue B	m-15	William McGee	878-7639	09/05/89	12/10/89	12/18/89	96	KP [NR]
1645104	m-16 Avenue B	m-16	Mr. Winfree	878-7639	09/05/89	12/10/89	12/18/89	96	KP
1645107	m-17 Avenue B	m-17	Samuel Powell	824-0740	09/05/89	12/05/89	12/08/89	91	DEJKP
1644008	m-18 Avenue B	m-18	Michelle McSwain	878-1482	09/14/89	12/14/89	12/18/89	91	KP
1645123	m-19 Avenue B	m-19	Jack Iglesias	878-1919	09/05/89	12/13/89	12/27/89	99	KP
1645142	m-20 Avenue B	m-20	Keith Morris	870-1414	09/05/89	12/05/89	12/08/89	91	KP
1644030	m-21 Avenue B	m-21	Kendell Cornwell	878-9215	09/05/89	12/05/89	12/08/89	91	KP
1645101	m-22 Avenue B	m-22	Edward Salazar	824-2775	09/05/89	02/07/90	02/19/90	155	KP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Midway Army Housing Area (Cont'd)**  
**Kent, Washington 98032**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (206)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1644013	m-23 Avenue B	m-23	Williams	878-2813	09/05/89	12/24/89	12/27/89	101	KP [NR]
1644009	m-24 Jeffrey Rd.	m-24	Walker	828-0699	09/14/89				DEJNP
1645118	m-25 Jeffrey Rd.	m-25	Auguster Montgomery	878-3552	09/05/89				KP [NR]
1645124	m-26 Jeffrey Rd.	m-26	Strong	878-5253	09/05/89	12/09/89	12/12/89	95	DJKP
1645108	m-27 Jeffrey Rd.	m-27	Mr. + Mrs. Wilson	878-7864	09/05/89				KP [NR]
1645114	m-28 Jeffrey Rd.	m-28	Brad Beyer	878-8453	09/05/89	01/01/90	01/04/90	118	KP
1645137	m-29 Jeffrey Rd.	m-29	William Watkins	878-8126	09/05/89	12/15/89	12/19/89	101	KP
1645113	m-30 Jeffrey Rd.	m-30	Douglas Shaffer	870-1427	09/05/89	12/06/89	12/12/89	92	KP
1645138	m-31 Jeffrey Rd.	m-31	Mr. + Mrs. Nordahl	824-5775	09/05/89	12/09/89	12/12/89	95	DJKP
1645115	m-32 Jeffrey Rd.	m-32	Mr. + Mrs. Spindler	878-3499	09/05/89	12/07/89	12/12/89	93	KP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Youngs Lake Army Housing Area  
Renton, Washington 98055  
Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (206)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645105	L-01	L-1	Elliot	226-0112	09/05/89	12/09/89	12/18/89	95	KQU
1645106	L-02	L-2	William Miller	235-6974	09/05/89	12/08/89	12/12/89	94	EKQ
1645099	L-03	L-3	Simmons	277-5930	09/05/89	12/31/89	01/05/90	117	KQ
1645097	L-04	L-4	Patterson	235-7044	09/05/89	12/14/89	12/19/89	100	KQ
1645098	L-05	L-5	Peters	277-6786	09/05/89	12/06/89	12/12/89	92	KQ
1645131	L-06	L-6	Mary Watson	226-4199	09/05/89	12/05/89	12/08/89	91	DJKQ
1645096	L-07	L-7	Robert Adams	228-1611	09/05/89	12/10/89	12/18/89	96	KQ
1645089	L-08	L-8	Walter L. Alan		09/14/89				KQ[NR]
1645094	L-09	L-9	John Dobay	235-6636	09/05/89	01/14/90	01/19/90	131	EKP
1645095	L-10	L-10	Smith	235-9177	09/05/89	01/02/90	01/08/90	119	KPU
1645117	L-11	L-11	Sharon Fretschler	228-8166	09/05/89	12/05/89	12/08/89	91	KPU
1645093	L-12	L-12	Teresita	226-1368	09/05/89	12/13/89	12/18/89	99	EKPU
1645132	L-13	L-13	Leeper	228-2282	09/05/89	12/05/89	12/08/89	91	KP
1644010	L-14	L-14	Olympia MacFinn	271-4865	09/14/89	12/21/89	12/27/89	98	KP
1645128	L-15	L-15	Berglin	271-8547	09/05/89	12/05/89	12/08/89	91	KPU
1645127	L-16	L-16	Silva	277-0266	09/05/89	11/28/89	12/04/89	84	HKQ
1645102	L-17	L-17	Harrison	226-8121	09/05/89	12/05/89	01/22/90	91	KQ
1644017	L-18	L-18	Parker	271-3813	09/14/89				KQ[NR]
1644019	L-19	L-19	Hammond	265-0882	09/14/89				KQ[NR]
1645133	L-20	L-20	Christian	271-1455	09/05/89				AKQ[NR]
1645103	L-20	L-20	Christian	271-1455	09/05/89				AKQ[NR]
1645122	L-21	L-21	Scott	277-6536	09/05/89	12/05/89	12/08/89	91	KQ
1644011	L-22	L-22	Trail	235-4620	09/06/89	12/03/89	12/08/89	88	AKQ
1644014	L-22	L-22	Trail	235-4620	09/06/89	12/03/89	12/08/89	88	AKQU

**\*Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capschert home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Youngs Lake Army Housing Area (Cont'd)**  
**Renton, Washington 98055**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (206)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1645140	L-23	L-23	Marlene Clark	235-9949	09/05/89	12/03/89	12/08/89	89	KQ
1644031	L-24	L-24	Peterson	235-8719	09/06/89	12/05/89	12/08/89	90	DJKQ
1645121	L-25	L-25	Clemons	255-1449	09/05/89	01/06/90	01/12/90	123	AKQ
1645100	L-25	L-25	Clemons	255-1449	09/05/89	01/06/90	01/12/90	123	AKQ
1645130	L-26	L-26	David Steen	277-1714	09/05/89	12/05/89	12/08/89	91	DJKQ
1645134	L-27	L-27	Dean Warden	271-9191	09/05/89	12/05/89	12/08/89	91	DJKQ
1645120	L-28	L-28	Simpkins	228-1580	09/05/89	01/07/90	01/12/90	124	ELP

**\*Key to Remarks:**

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Sun Prairie Army Housing Area**  
**Sun Prairie, Wisconsin 53590**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (608)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1641504	086 Andrews Dr.	1114	Anastasi	837-0084	09/13/89	12/13/89	12/18/89	91	KR
1643996	117 Andrews Dr.	1122		837-4683	09/13/89	12/13/89	12/18/89	91	KR
1644023	119 Andrews Dr.	1106	Janczewski	837-2951	09/13/89	12/13/89	12/18/89	91	KR
1647587	095 Ent Dr.	1105	Griffin	257-8635	09/15/89	12/14/89	12/18/89	90	KR
1644107	095 Ent Dr.	1109	Bernier	825-8185	09/15/89	12/13/89	12/18/89	89	KR
1644106	098 Ent Dr.	1113	Mellum	825-6356	09/15/89	12/13/89	12/18/89	89	KR [NR]
1647585	098 Ent Dr.	1117	Griffs	837-0487	09/15/89	12/13/89	12/18/89	89	AKR
1643122	096 Ent Dr.	1117	Griffs	837-0487	09/15/89	12/13/89	12/18/89	89	AKR
1647584	097 Ent Dr.	1201	Heath	837-4949	09/15/89	12/13/89	12/18/89	89	KR
1646992	097 Ent Dr.	1205	Hansen	837-4021	09/15/89	12/13/89	12/18/89	89	KR
1646999	098 Ent Dr.	1209	Klein	837-9734	09/13/89	12/13/89	12/18/89	91	KR
1647009	098 Ent Dr.	1213	Hoke	837-6514	09/13/89	12/13/89	12/18/89	91	KR
1644113	099 Ent Dr.	1217	Hoover	837-3147	09/15/89	12/13/89	12/18/89	89	KR
1643134	099 Ent Dr.	1221	Kenneth Gorr	837-4652	09/15/89	12/13/89	12/18/89	89	KR
1646979	100 Ent Dr.	1220	Young	837-0036	09/15/89	12/13/89	12/18/89	89	KR
1643121	100 Ent Dr.	1224	Schoenberg	837-0528	09/15/89	12/13/89	12/18/89	89	AKR
1644108	100 Ent Dr.	1224	Schoenberg	837-0528	09/15/89	12/13/89	12/18/89	89	AKR
1647588	101 Ent Dr.	1212	Cornau	837-0468	09/15/89	12/18/89	12/22/89	94	KR
1641509	101 Ent Dr.	1216	Jerry Grimeshaw	837-3667	09/13/89	12/13/89	12/18/89	91	KR
1647586	102 Ent Dr.	1202	Clay	837-2960	09/15/89	12/13/89	12/18/89	89	KR
1647033	102 Ent Dr.	1208	Brown	825-6180	09/13/89	12/13/89	12/18/89	91	KR
1646996	103 Ent Dr.	1118	Brousseau	825-6346	09/13/89	12/13/89	12/18/89	91	KR
1647004	103 Ent Dr.	1122	Greenwell	837-1011	09/13/89	12/15/89	12/18/89	93	KR
1646997	104 Ent Dr.	1110	Charles Lund	837-0233	09/13/89	12/13/89	12/18/89	91	KR

**Key to Remarks:**

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house

- H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown

- P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Sun Prairie Army Housing Area (Cont'd)**  
**Sun Prairie, Wisconsin 53590**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (608)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643123	104 Ent Dr.	1114	Ball	837-3149	09/15/89	12/13/89	12/18/89	89	KR
1641505	105 Ent Dr.	1102	Christiansen	837-7111	09/13/89	12/13/89	12/18/89	91	EKR
1647007	105 Ent Dr.	1106	Johnson	825-6423	09/14/89	12/15/89	12/18/89	92	DJKR
1647011	147 Fairchild	1001	Hopkins	837-0716	09/14/89	12/13/89	12/18/89	90	AKR
1643130	147 Fairchild	1001	Hopkins	837-0716	09/14/89	12/13/89	12/18/89	90	AKR
1647021	148 Fairchild	1009	McNutt	825-6474	09/14/89	12/15/89	12/18/89	92	DJKP
1647023	149 Fairchild	1017	Ahn	837-3489	09/14/89	12/13/89	12/18/89	90	KP
1647006	150 Fairchild	1101	Garbis	837-9379	09/14/89	10/17/89	10/20/89	33	DHJKP
1646988	161 Fairchild	1109	Mikos	837-0365	09/14/89	12/13/89	12/18/89	90	KP
1646984	138 Harmon Circle	1134	Sweet	825-2896	09/14/89	12/13/89	12/18/89	90	KP
1644022	139 Harmon Circle	1126	Meeusen	837-8289	09/14/89	12/13/89	12/18/89	90	KP
1643988	140 Harmon Circle	1118	Wilhelm	837-4407	09/13/89	12/13/89	12/18/89	91	KP
1647032	141 Harmon Circle	1110	Brant	837-8714	09/14/89	12/13/89	12/18/89	90	KP
1643980	142 Harmon Circle	1102	Paulson	837-8163	09/14/89	12/13/89	12/18/89	90	KP
1643109	143 Harmon Circle	1101	Garnison	837-3330	09/14/89	12/15/89	12/18/89	92	DJKP
1647015	144 Harmon Circle	1109	Riley	837-0852	09/14/89	12/13/89	12/18/89	90	KP
1647010	145 Harmon Circle	1117	Kusenburger	837-2130	09/14/89	12/13/89	12/18/89	90	KP
1645091	146 Harmon Circle	1129	Mark Grandstaff	825-6270	09/13/89	12/13/89	12/18/89	91	KP
1646984	066 N. Andrews Dr.	1110	Peasley	837-0719	09/15/89	12/12/89	12/18/89	88	KR
1643117	067 N. Andrews Dr.	1102	Dirden	837-1961	09/15/89	12/13/89	12/18/89	89	KR
1646993	067 N. Andrews Dr.	1106	Tackett	825-6365	09/15/89	12/13/89	12/18/89	89	KR
1647581	068 N. Andrews Dr.	1010	Chapel	241-7262	09/15/89	12/15/89	12/18/89	91	KR [NR]
1646980	068 N. Andrews Dr.	1014	Mounsey	825-6442	09/15/89	12/15/89	12/18/89	91	KR
1643116	069 N. Andrews Dr.	1002	Butters	837-4698	09/15/89	12/13/89	12/18/89	89	KR

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

Sun Prairie Army Housing Area (Cont'd)  
Sun Prairie, Wisconsin 53590  
Indoor Radon Monitoring Conditions

Detector No.	Address	Unit No.	Occupants	Telephone No. (608)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643124	089 N. Andrews Dr.	1006	Canwright	837-1004	09/15/89	12/13/89	12/18/89	89	KR
1643989	120 Schumann	1026	John Baker	825-2874	09/13/89	12/13/89	12/18/89	91	KP
1644026	121 Schumann	1018	Zupan	837-5290	09/13/89	12/13/89	12/18/89	91	KP
1646990	122 Schumann	1010	Hengel	837-4488	09/14/89	12/13/89	12/18/89	90	KP
1643998	123 Schumann	1002	Davison	837-9074	09/13/89	12/13/89	12/18/89	91	KP
1647020	124 Schumann	0926	Bell	825-6481	09/14/89	12/15/89	12/18/89	92	DJKP
1641501	125 Schumann	0918	Holder	837-5647	09/14/89	12/13/89	12/18/89	90	KP
1647017	126 Schumann	0910	Lee	825-2836	09/14/89	12/13/89	12/18/89	90	KP
1646986	127 Schumann	0902	Runeas	837-5410	09/14/89	12/13/89	12/18/89	90	AKP
1647016	127 Schumann	0902	Runeas	837-5410	09/14/89	12/13/89	12/18/89	90	AKP
1647018	128 Schumann	0830	Kirkerwicz	837-2439	09/14/89	12/13/89	12/18/89	90	KP
1643131	129 Schumann	0822	No resident		09/14/89	12/13/89	12/18/89	90	GKP
1647024	130 Schumann	0814	Greer	837-0294	09/14/89	12/13/89	12/18/89	90	KP
1647005	131 Schumann	0906	Jack Amarel	837-2098	09/14/89	12/13/89	12/18/89	90	KP
1647029	152 Stull	1110	Benusa	837-7682	09/14/89	12/13/89	12/18/89	90	KP
1647014	153 Stull	1102	Brown	837-1074	09/14/89	12/14/89	12/18/89	91	KP
1647013	154 Stull	1018	LeDuff	837-1992	09/14/89	12/13/89	12/18/89	90	KP
1647560	155 Stull	1010	Neecham	837-3914	09/14/89	12/13/89	12/18/89	90	KP
1647003	156 Stull	1002	Kuhn	837-5284	09/09/89	12/13/89	12/18/89	95	NR
1647002	157 Stull	1002	Kuhn	837-5284	09/14/89	12/13/89	12/18/89	90	KP
1647026	158 Stull	1101	Hight	837-6092	09/14/89	12/18/89	12/22/89	96	KP [NR]
1647001	159 Stull	1017	no resident		09/13/89	12/18/89	12/22/89	96	GKR
1647025	160 Stull	1009	William Cork	837-4145	09/14/89	12/15/89	12/18/89	92	DJKP
1647012	161 Stull	1001	Butrick	825-6429	09/14/89	12/13/89	12/18/89	90	KP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house

- H Exposure < 80 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom
- L Detector in living room
- M Detector in kitchen
- N Detector location unknown

- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Sun Prairie Army Housing Area (Cont'd)**  
**Sun Prairie, Wisconsin 53590**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (608)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1646977	090 Vandenburg	1220	George	837-2372	09/15/89	12/15/89	12/18/89	91	DJKR
1643132	090 Vandenburg	1224	Wood	837-6491	09/15/89	12/13/89	12/18/89	89	KR
1647008	091 Vandenburg	1210	Webb	837-6861	09/15/89	12/13/89	12/18/89	89	KR
1647035	091 Vandenburg	1216	Wynn	837-5254	09/13/89	12/13/89	12/18/89	91	KR
1641503	092 Vandenburg	1202	Ross	837-7921	09/13/89	12/13/89	01/15/90	91	KR
1646998	092 Vandenburg	1206	Clay	837-4899	09/13/89	12/13/89	12/18/89	91	AKR
1646995	092 Vandenburg	1206	Clay	837-4899	09/13/89	12/13/89	12/18/89	91	AKR
1643127	093 Vandenburg	1110	Sibley	837-1010	09/15/89	12/13/89	12/18/89	90	KR
1643125	093 Vandenburg	1114	Trakel	837-2718	09/15/89	12/13/89	12/18/89	90	KR
1647582	094 Vandenburg	1102	Zagrebaki	837-3796	09/15/89	12/13/89	12/18/89	89	KR
1643118	094 Vandenburg	1106	Meddings	825-6123	09/13/89	12/13/89	12/18/89	91	KR
1643108	106 W. Andrews Dr.	1001	Young	837-0233	09/14/89	12/13/89	12/18/89	90	KR
1643107	106 W. Andrews Dr.	1009	Bench	837-4731	09/14/89	12/13/89	12/18/89	90	KR
1645989	107 W. Andrews Dr.	1017	McCann	825-2863	09/14/89	12/14/89	12/18/89	91	KR
1647028	107 W. Andrews Dr.	1025	Anthony Broadbent	837-2471	09/13/89	12/13/89	12/18/89	91	KR
1647548	108 W. Andrews Dr.	1033	Garoute	825-6108	09/13/89	12/13/89	12/18/89	91	KR
1643104	108 W. Andrews Dr.	1041	Wilkins	837-2776	09/14/89	12/13/89	12/18/89	90	KR
1643103	109 W. Andrews Dr.	1049	Guy	837-0289	09/14/89	12/13/89	12/18/89	90	KR
1643135	109 W. Andrews Dr.	1057	Newhauser	837-5976	09/14/89	12/13/89	12/18/89	90	KR
1647000	110 W. Andrews Dr.	1105	McClatchey	837-4912	09/14/89	12/15/89	12/18/89	92	KR
1646987	110 W. Andrews Dr.	1109	Punzel	837-4080	09/14/89	12/14/89	12/18/89	91	AKR
1643128	110 W. Andrews Dr.	1109	Punzel	837-4080	09/14/89	12/14/89	12/18/89	91	AKR
1644001	111 W. Andrews Dr.	1113	Los Laras	837-9590	09/13/89	12/13/89	12/18/89	91	KR
1643129	111 W. Andrews Dr.	1117	Jones	837-0224	09/14/89	12/13/89	12/18/89	90	KR

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Sun Prairie Army Housing Area (Cont'd)**  
**Sun Prairie, Wisconsin 53590**  
**Indoor Radon Monitoring Conditions**

Detector No.	Address	Unit No.	Occupants	Telephone No. (608)	Start Date	End Date	Received Date	Duration (days)	Remarks <sup>a</sup>
1643113	112 W. Andrews Dr.	1121	No resident		09/14/89	12/13/89	12/18/89	90	GLR
1646985	112 W. Andrews Dr.	1125	Clark	241-8368	09/15/89	12/13/89	12/18/89	89	KR
1643115	113 W. Andrews Dr.	1201	Schvner	837-7314	09/14/89	12/13/89	12/18/89	90	KR
1643995	113 W. Andrews Dr.	1205	Kelly Shattuck	837-9658	09/13/89	12/13/89	12/18/89	91	AKR
1644025	113 W. Andrews Dr.	1205	Kelly Shattuck	837-9658	09/13/89	12/13/89	12/18/89	91	AKR
1643120	114 W. Andrews Dr.	1209	Schick	825-6006	09/14/89	12/15/89	12/18/89	92	KR
1646983	114 W. Andrews Dr.	1213	Mills	837-6556	09/14/89	12/13/89	12/18/89	90	KR
1643114	115 W. Andrews Dr.	1210	Thrasher	837-2016	09/14/89	12/01/89	12/04/89	78	DHJKR
1644029	115 W. Andrews Dr.	1214	Dexter	837-9445	09/13/89	12/13/89	12/18/89	91	KR
1643111	116 W. Andrews Dr.	1202	Aubenstein	837-9612	09/15/89	12/13/89	12/18/89	89	AKR
1643110	116 W. Andrews Dr.	1202	Aubenstein	837-9612	09/15/89	12/13/89	12/18/89	89	AKR
1646978	116 W. Andrews Dr.	1206	Stowell	837-9103	09/15/89	12/13/89	12/18/89	89	KR
1643102	117 W. Andrews Dr.	1126	Chase	837-9127	09/15/89	12/13/89	12/18/89	89	KR
1646991	118 W. Andrews Dr.	1114	Dotson	837-3875	09/15/89	12/13/89	12/18/89	89	KR
1643112	118 W. Andrews Dr.	1118	No resident		09/15/89	12/13/89	12/18/89	89	GKR
1643105	119 W. Andrews Dr.	1110	Allegra	837-0993	09/14/89	12/13/89	12/18/89	90	KR
1643106	132 W. Andrews Dr.	1042	Snyder	837-2984	09/14/89	12/14/89	12/18/89	91	KP
1647034	133 W. Andrews Dr.	1034	Edey	837-2526	09/13/89	12/13/89	12/18/89	91	NP
1643126	134 W. Andrews Dr.	1026	Kelly	837-1074	09/14/89	12/15/89	12/18/89	92	DJKP
1647565	135 W. Andrews Dr.	1018			09/13/89	12/13/89	12/18/89	91	NP
1643133	136 W. Andrews Dr.	1010	Batterman	837-1989	09/14/89	12/13/89	12/18/89	90	KP
1644006	137 W. Andrews Dr.	1002	Joel Schwankl	837-0412	09/13/89	12/12/89	12/18/89	90	KP

<sup>a</sup>Key to Remarks:

- A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom  
 L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned



## **Appendix F**

### **Property-Specific Monitoring Results**



**Ansonia Army Housing Area  
Ansonia, Connecticut 06401  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 17  
 Number of replicate pairs: 1  
 Highest reported result: 16.3  
 Lowest reported result: 1.0

Number of detectors returned: 15  
 Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [pCi/L days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1648230	01 Ford St.	01	306.3	3.3	7.6	B K P
0	02 Hughes Cir.	02				[ND]
1648274	03 Hughes Cir.	03	96.1	1.0	12.5	D J K P
0	04 Hughes Cir.	04				[ND]
1648245	05 Hughes Cir.	05	168.4	1.1	10.1	D J K P
1648270	06 Hughes Cir.	06	189.0	2.1	9.2	K P
1648260	07 Hughes Cir.	07	346.7	2.4	7.0	B K P
1648267	08 Hughes Cir.	08	246.8	2.7	8.2	B E K P
1648257	09 Hughes Cir.	09	1064.7	8.6	4.2	A C D E J K P
1648251	09 Hughes Cir.	09	2016.6	16.3	4.0	A C D E J K P
1648246	10 Hughes Cir.	10	503.8	3.3	6.0	D H J K P
1648242	11 Hughes Cir.	11	949.6	10.8	4.3	B L P
1648272	12 Hughes Cir.	12	390.5	3.6	6.6	D J K P
1648247	13 Hughes Cir.	13	188.9	1.6	9.5	D J K P
1648277	14 Hughes Cir.	14	371.2	4.1	6.7	C J K P
1648252	15 Hughes Cir.	15	599.0	6.7	5.3	B K P
1648273	16 Hughes Cir.	16	301.1	3.0	7.4	C D J K P

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**East Windsor Army Housing Area  
East Windsor, Connecticut 06088  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 17  
Number of replicate pairs: 1  
Highest reported result: 0.6  
Lowest reported result: 0.2

Number of detectors returned: 14  
Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1646457	27 Phelps Rd.	01	36.5	0.3	18.3	DJKP
1646442	29 Phelps Rd.	14	38.2	0.4	18.0	ADEJKP
1645763	29 Phelps Rd.	14	30.0	0.3		ADJKPU
1645769	31 Phelps Rd.	15	40.0	0.4	17.7	DJKP
1646436	33 Phelps Rd.	16	34.7	0.4	18.6	DJKP
1644237	02 South Rd.	02	69.8	0.6	14.3	BNP
1645768	03 South Rd.	03	64.5	0.6	14.7	DEJKP
1645762	04 South Rd.	04	55.8	0.6	15.6	CJKP
0	05 South Rd.	05				[ND]
1644235	06 South Rd.	06				KP [NR]
1644249	07 South Rd.	07	43.5	0.4	17.1	DEJKP
1644234	08 South Rd.	08	38.2	0.4	18.0	BKP
1645766	09 South Rd.	09	41.7	0.5	17.4	KP
1644248	10 South Rd.	10				KP [NR]
1645767	11 South Rd.	11	39.7	0.2	16.2	KP
1644233	12 South Rd.	12	62.2	0.4	15.4	EKP
1644246	13 South Rd.	13	30.0	0.2		DEJNPU

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Fairfield Army Housing Area  
Fairfield, Connecticut 06430  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 28  
Number of detectors installed: 30  
Number of replicate pairs: 2  
Highest reported result: 2.3  
Lowest reported result: 0.7

Number of detectors returned: 26  
Number of outstanding detectors: 4

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1648239	016 Jarvis Ct.	16	243.3	2.3	8.2	DJKP
1646478	025 Jarvis Ct.	25	246.6	2.0	8.4	KP
1644216	028 Jarvis Ct.	28	159.1	1.7	10.3	KP
1644212	037 Jarvis Ct.	37	180.2	2.0	9.4	CKP
1646493	042 Jarvis Ct.	42	148.6	1.6	10.3	KP
1648269	051 Jarvis Ct.	51	248.5	1.6	8.4	KP
0	058 Jarvis Ct.	58				[ND]
1644202	065 Jarvis Ct.	65				KP [NR]
1644205	070 Jarvis Ct.	70	227.9	1.4	8.4	KP
1646487	077 Jarvis Ct.	77	343.5	2.3	7.2	DJKP
1648254	084 Jarvis Ct.	84	131.1	1.4	11.3	EKP
1644206	089 Jarvis Ct.	89	94.3	1.0	12.6	DJKP
1648235	100 Jarvis Ct.	100	363.2	2.2	6.8	EKP
1644201	111 Jarvis Ct.	111	231.7	1.5	8.7	AKP
1644208	111 Jarvis Ct.	111	198.2	1.3	9.3	AKP
1648234	320 Quincy St.	320	187.2	2.3	9.3	BKP
1648262	321 Quincy St.	321	112.8	0.7	11.3	BCDJKP
1648258	336 Quincy St.	336	110.6	1.2	12.1	BDEJKP
1644214	350 Quincy St.	350	208.2	2.2	8.8	KP
1646475	362 Quincy St.	362	152.2	1.5	10.2	AKP
1646494	362 Quincy St.	362	152.2	1.5	10.2	AKP
1648237	376 Quincy St.	376	162.2	1.2	9.8	BCJNP
1648268	377 Quincy St.	377				KP [NR]
1648275	385 Quincy St.	385	253.5	1.8	8.0	BCJNP
1644203	394 Quincy St.	394	118.3	0.7	11.1	DJKP
1646495	397 Quincy St.	397	148.6	1.5	10.3	KP
1648264	409 Quincy St.	409	313.8	1.8	7.3	BCKP
1648253	412 Quincy St.	412	139.9	1.2	10.6	DJKP
1644211	673 Reef Rd.	673	93.9	1.0	13.0	DEJKP
1644209	703 Reef Rd.	703				BN P [NR]

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Manchester Army Housing Area  
Manchester, Connecticut 06040  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 32  
Number of detectors installed: 33  
Number of replicate pairs: 1  
Highest reported result: 0.8  
Lowest reported result: 0.3

Number of detectors returned: 31  
Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [pCi/L days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1646453	002 Nike Cir.	002	64.5	0.6	14.7	KP
1646428	007 Nike Cir.	007	65.9	0.6	15.1	DJKP
1646427	008 Nike Cir.	008	59.3	0.6	15.2	KP
1646429	011 Nike Cir.	011	82.7	0.6	13.7	KP
1646456	017 Nike Cir.	017	89.1	0.8	12.9	BCDEJNP
1646450	018 Nike Cir.	018	48.8	0.5	16.4	KP
1646449	019 Nike Cir.	019	80.8	0.8	13.9	DEJKP
1646461	027 Nike Cir.	027	48.8	0.4	16.4	DEJKP
1646454	029 Nike Cir.	029	64.0	0.7	15.2	DJKP
1646459	034 Nike Cir.	034	41.7	0.3	17.4	KP
1645765	037 Nike Cir.	037	43.5	0.5	17.7	BKP
1645759	041 Nike Cir.	041	30.0	0.3		DJKPU
1646425	046 Nike Cir.	046	45.3	0.5	16.9	KP
1644245	049 Nike Cir.	049	45.3	0.5	16.9	BEKP
1646452	052 Nike Cir.	052	51.0	0.4	16.7	DJKP
1646430	055 Nike Cir.	055	61.7	0.4	14.1	KP
1645760	060 Nike Cir.	060				BKP[NR]
1646443	061 Nike Cir.	061	45.4	0.5	17.4	DJKP
1646439	066 Nike Cir.	066	57.5	0.5	15.4	DEJNP
1644242	069 Nike Cir.	069				BKP[NR]
1646444	074 Nike Cir.	074	43.0	0.5	17.7	KP
1646458	075 Nike Cir.	075	55.8	0.6	15.6	DEJKP
1646426	079 Nike Cir.	079	55.8	0.6	15.6	EKP
1646432	083 Nike Cir.	083	56.6	0.4	16.0	DEJKP
1646431	087 Nike Cir.	087	5.2	0.6	14.3	DJKP
1646433	088 Nike Cir.	088	30.0	0.3		KPU
1646434	089 Nike Cir.	089	43.5	0.4	17.7	ADEJKP
1646451	089 Nike Cir.	089	61.0	0.5	15.1	ADEJKP

**\*Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Manchester Army Housing Area (Cont'd)**  
**Manchester, Connecticut 06040**  
**Indoor Radon Concentrations**

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1644243	093 Nike Cir.	093	49.1	0.5	16.9	B K P
1646424	099 Nike Cir.	099	95.7	0.6	12.9	K P
1646437	102 Nike Cir.	102	30.6	0.3	17.4	K P
1644244	112 Nike Cir.	112	71.5	0.8	14.1	B K P
1646435	118 Nike Cir.	118	112.8	0.6	11.3	D J K P

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Middletown Army Housing Area  
Middletown, Connecticut 06457  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 17  
Number of replicate pairs: 1  
Highest reported result: 1.1  
Lowest reported result: 0.3

Number of detectors returned: 17  
Number of outstanding detectors: 0

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641543	32 Military Rd	32	103.2	1.1	12.5	KP
1644238	42 Military Rd	42	55.8	0.4	15.6	BDJNP
1644226	49 Military Rd	49	30.5	0.3	20.0	KPU
1641517	50 Military Rd	50	86.4	0.9	13.5	DJKP
1645761	57 Military Rd	57	55.8	0.6	15.6	KP
1644232	58 Military Rd	58	30.0	0.3	-	KPU
1644229	67 Military Rd	67	45.3	0.5	16.9	DJKP
1644252	68 Military Rd	68	30.0	0.5	-	HKPU
1644251	73 Military Rd	73	31.2	0.3	19.2	KP
1644230	74 Military Rd	74	56.6	0.6	16.0	KP
1641519	83 Military Rd	83	43.5	0.5	17.7	DJKP
1644225	84 Military Rd	84	34.7	0.3	18.6	KP
1641537	89 Military Rd	89	54.7	0.6	16.2	BCJNP
1644228	90 Military Rd	90	69.6	0.5	14.7	KP
1645758	97 Military Rd	97	30.0	0.3	-	AKPU
1644254	97 Military Rd	97	43.5	0.5	17.1	AKP
1641518	98 Military Rd	98	47.0	0.5	16.7	EKP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Millford Army Housing Area  
Millford, Connecticut 06460  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 18  
Number of replicate pairs: 2  
Highest reported result: 1.7  
Lowest reported result: 0.5

Number of detectors returned: 17  
Number of outstanding detectors: 1

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1648229	01 Alpha St.	01	103.1	1.1	12.1	KP
1646485	02 Alpha St.	02	92.0	0.9	13.1	DJKP
1646477	03 Alpha St.	03	90.8	0.8	12.8	DEJKP
1648228	04 Alpha St.	04	54.0	0.5	15.8	DEJKP
1646479	05 Alpha St.	05				KP [NR]
1644210	06 Alpha St.	06	96.1	0.8	12.5	ADJKP
1646491	06 Alpha St.	06	78.5	0.6	13.6	ADJKP
1646488	07 Alpha St.	07	94.3	1.0	12.6	KP
1648266	08 Alpha St.	08	257.8	1.7	8.2	DEJKP
1648259	09 Alpha St.	09	67.8	0.7	14.0	CDJKP
1648243	10 Alpha St.	10	45.3	0.5	16.9	BCDJNP
1646480	11 Alpha St.	11				KP
1648250	12 Alpha St.	12	57.5	0.6	15.4	KP
1648227	13 Alpha St.	13	134.6	1.2	10.8	DJKP
1648249	14 Alpha St.	14	57.5	0.6	5.4	DJKP
1648276	15 Alpha St.	15	83.8	0.9	13.2	EKP
1648233	16 Alpha St.	16	99.6	1.1	12.3	ADJKP
1648265	16 Alpha St.	16	108.3	1.2	11.9	ADJKP

**\*Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**New Britain Army Housing Area  
New Britain, Connecticut 06051  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 17  
Number of replicate pairs: 1  
Highest reported result: 2.9  
Lowest reported result: 0.5

Number of detectors returned: 15  
Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641516	006 Green St.	06	85.6	0.9	13.1	KP
1641512	014 Green St.	14	80.8	0.7	13.9	DJKP
1641539	005 Halsey St.	05	68.0	0.7	14.4	DJKP
1644227	017 Halsey St.	17	257.3	2.9	8.0	BENP
1641511	031 Halsey St.	31	47.3	0.5	17.1	DJKP
1641510	011 Kulper St.	11	115.4	1.2	11.5	KP
1641546	012 Kulper St.	12	71.5	0.8	14.1	KP
1641534	019 Kulper St.	19	139.9	1.1	10.6	DEJKP
1641521	020 Kulper St.	20	92.6	0.7	12.7	DJKP
1641549	027 Kulper Rd.	27	157.4	1.2	10.1	DEJKP
0	028 Kulper St.	28				[ND]
1641535	035 Kulper Rd.	35	89.1	0.8	12.9	BCDJKP
1641540	298 Rocky Hill Ave.	298	207.5	1.4	9.1	AEJKP
1641523	298 Rocky Hill Ave.	298	188.9	1.2	9.5	AEJKP
1641520	306 Rocky Hill Ave.	306				KP[NR]
1641538	312 Rocky Hill Ave.	312	64.0	0.6	15.2	DEJKP
1646482	320 Rocky Hill Ave.	320	66.3	0.7	14.6	KP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Orange Army Housing Area  
Orange, Connecticut 06477  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 20  
 Number of detectors installed: 24  
 Number of replicate pairs: 4  
 Highest reported result: 2.2  
 Lowest reported result: 0.5

Number of detectors returned: 20  
 Number of outstanding detectors: 4

Detector No.	Address	Unit No.	Exposure (pCi/L) days	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
0	343 Smith Farm Rd					[ND]
1648284	348 Smith Farm Rd		114.3	1.2	12.0	AKP
1646447	348 Smith Farm Rd		115.4	1.2	11.5	AKP
1646445	349 Smith Farm Rd		108.3	1.1	11.9	KP
1646440	350 Smith Farm Rd		153.5	1.0	10.5	KP
1648281	351 Smith Farm Rd		99.6	1.1	12.3	KP
1646441	354 Smith Farm Rd		166.2	1.8	9.8	BENP
1648282	355 Smith Farm Rd		66.3	1.5	14.6	AHKP
1646480	355 Smith Farm Rd		103.1	1.2	12.1	AKP
1646446	359 Smith Farm Rd					KP [NR]
1648278	363 Smith Farm Rd		113.6	1.3	11.6	DJKP
1648285	342 Sybil St.		168.4	1.1	10.1	KP
1642288	345 Sybil St.		226.1	1.7	8.5	GMP
1646469	349 Sybil St.		80.3	0.9	13.5	KP
1648279	350 Sybil St.					AKP [NR]
1648280	350 Sybil St.					AKP [NR]
1648286	351 Sybil St.		52.3	0.5	16.0	DJKP
1642300	353 Sybil St.		89.1	1.0	12.9	KP
1646422	354 Sybil St.		200.1	2.2	9.3	AKP
1646423	354 Sybil St.		199.5	2.2	9.0	AKP
1646421	355 Sybil St.		157.4	1.6	10.1	DEJKP
1646438	358 Sybil St.		78.5	0.8	13.6	DJKP
1648287	359 Sybil St.		85.6	0.8	13.1	DEJKP
1642286	362 Sybil St.		101.3	0.8	12.2	DJKP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Plainville Army Housing Area  
Plainville, Connecticut 06062  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 32  
 Number of detectors installed: 36  
 Number of replicate pairs: 4  
 Highest reported result: 1.6  
 Lowest reported result: 0.4

Number of detectors returned: 18  
 Number of outstanding detectors: 18

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643451	01 Cassidy Dr.	01	234.5	2.5	8.4	E J K P
1643438	02 Cassidy Dr.	02				A K P [NR]
1643456	02 Cassidy Dr.	02				A K P [NR]
1641527	03 Cassidy Dr.	03	315.6	3.4	7.5	D E J K P
0	04 Cassidy Dr.	04				[ND]
1643454	05 Cassidy Dr.	05				K P [NR]
1643455	06 Cassidy Dr.	06	125.9	1.3	11.1	D J K P
1641552	07 Cassidy Dr.	07				K P [NR]
1643423	08 Cassidy Dr.	08				K M P [NR]
1641550	09 Cassidy Dr.	09	82.7	0.8	13.7	D J K P
1641533	10 Cassidy Dr.	10	120.6	1.3	11.3	D J K P
0	11 Cassidy Dr.	11				[ND]
1641525	12 Cassidy Dr.	12	87.3	0.9	13.0	A K P
1641526	12 Cassidy Dr.	12	40.0	0.4	17.7	A K P
1641560	13 Cassidy Dr.	13	66.3	0.7	14.6	E K P
1641553	14 Cassidy Dr.	14				K P [NR]
1641514	15 Cassidy Dr.	15	40.0	0.4	17.7	D J K P
1641515	16 Cassidy Dr.	16				K P [NR]
1641536	17 Cassidy Dr.	17				A K P [NR]
1641522	17 Cassidy Dr.	17				A K P [NR]
1641547	18 Cassidy Dr.	18				K P [NR]
1641555	19 Cassidy Dr.	19				K P [NR]
1641559	20 Cassidy Dr.	20	127.4	1.4	11.4	D E J K P
0	21 Cassidy Dr.	21				[ND]
1641551	22 Cassidy Dr.	22				K P [NR]
1641532	23 Cassidy Dr.	23	30.0	0.3		D J K P U
1641544	24 Cassidy Dr.	24	119.9	1.3	11.7	K P
0	25 Cassidy Dr.	25				[ND]

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Plainville Army Housing Area (Cont'd)**  
**Plainville, Connecticut 06062**  
**Indoor Radon Concentrations**

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641557	26 Cassidy Dr.	26	227.9	1.3	8.4	EKP
0	27 Cassidy Dr.	27				[ND]
1641558	28 Cassidy Dr.	28	90.1	1.0	13.2	KP
0	29 Cassidy Dr.	29				[ND]
1641556	30 Cassidy Dr.	30	151.6	1.6	10.5	DJKP
1641529	31 Cassidy Dr.	31	139.9	1.5	10.6	KP
1641545	32 Cassidy Dr.	32	127.4	1.4	11.4	ADEJKP
1641513	32 Cassidy Dr.	32	113.6	1.2	11.6	ADEJKP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Portland Army Housing Area  
Portland, Connecticut 06480  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 15  
Number of detectors installed: 16  
Number of replicate pairs: 1  
Highest reported result: 1.5  
Lowest reported result: 0.4

Number of detectors returned: 15  
Number of outstanding detectors: 1

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1644250	01 Thompson Hill Rd	01	80.8	0.9	13.9	KP
1645757	02 Thompson Hill Rd	02	105.0	1.1	12.4	KP
1644218	03 Thompson Hill Rd	03	92.0	1.0	13.1	KP
1644222	04 Thompson Hill Rd	04	73.3	0.8	14.0	AKP
1644224	04 Thompson Hill Rd	04	68.0	0.7	14.4	AKP
1644219	05 Thompson Hill Rd	05	69.8	0.7	14.3	KP
1644241	06 Thompson Hill Rd	06	80.3	0.9	13.5	KP
1644255	07 Thompson Hill Rd	07	32.4	0.4	19.6	KP
1644221	08 Thompson Hill Rd	08	69.8	0.8	14.3	KP
1644223	09 Thompson Hill Rd	09	134.8	1.5	11.1	KP
1645764	10 Thompson Hill Rd	10	73.3	0.6	14.0	DJKP
1644220	11 Thompson Hill Rd	11	54.7	0.5	16.2	CDJKP
1644231	13 Thompson Hill Rd	13	63.3	0.7	14.6	KP
1644236	14 Thompson Hill Rd	14				CDEJNP [NR]
1644240	15 Thompson Hill Rd	15	64.5	0.9	14.7	BCHJNP
1644247	16 Thompson Hill Rd	16	80.3	0.7	13.5	DEJKP

**\*Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Shelton Army Housing Area  
Shelton, Connecticut 06484  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 17  
 Number of replicate pairs: 1  
 Highest reported result: 5.9  
 Lowest reported result: 1.3

Number of detectors returned: 16  
 Number of outstanding detectors: 1

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks*
1648232	01 Palmetto Cir.	01	281.0	1.5	7.6	GMP
1646466	02 Palmetto Cir.	02	243.0	1.3	8.1	GMP
1648238	03 Palmetto Cir.	03	580.8	3.1	5.4	GMP
1648236	04 Palmetto Cir.	04	718.1	3.9	4.9	GMP
1648241	05 Palmetto Cir.	05	449.0	2.4	6.1	GMP
1648261	06 Palmetto Cir.	06	586.2	3.2	5.4	GMP
1648240	07 Palmetto Cir.	07	559.1	3.0	5.5	GMP
1646468	08 Palmetto Cir.	08	924.0	5.0	4.4	GMP
1646465	09 Palmetto Cir.	09	1090.2	5.9	4.0	GMP
1648256	10 Palmetto Cir.	10	700.0	3.8	5.0	GMP
1642315	11 Palmetto Cir.	11	665.7	3.6	5.1	GMP
0	12 Palmetto Cir.	12				[ND]
1642309	13 Palmetto Cir.	13	622.4	3.3	5.3	GMP
1646471	14 Palmetto Cir.	14	649.4	3.5	5.2	AGMP
1648231	14 Palmetto Cir.	14	517.6	2.8	5.7	AGMP
1642301	15 Palmetto Cir.	15	714.5	3.8	4.9	GMP
1646045	16 Palmetto Cir.	16	449.0	2.4	6.1	GMP

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Westport Army Housing Area  
Westport, Connecticut 06880  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 17  
Number of replicate pairs: 1  
Highest reported result: 10.6  
Lowest reported result: 1.2

Number of detectors returned: 14  
Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1644207	01 Wassell Ln.	01	290.1	1.6	7.6	KP
1644213	03 Wassell Ln.	03	478.1	3.7	6.0	DJKP
1646484	05 Wassell Ln.	05				DJKP[NR]
1646490	06 Wassell Ln.	06	364.2	3.6	6.8	DEJKP
1646486	07 Wassell Ln.	07				KP[NR]
1646472	08 Wassell Ln.	08	1215.6	7.8	3.9	EMP
1646474	09 Wassell Ln.	09	113.6	1.2	11.6	KP
1646462	10 Wassell Ln.	10	437.8	4.8	6.2	BNP
1646481	11 Wassell Ln.	11	576.3	5.6	5.4	AKP
1644204	11 Wassell Ln.	11	495.6	4.8	5.9	AKP
1646473	12 Wassell Ln.	12				MP[NR]
1646483	15 Wassell Ln.	15	812.9	8.0	4.6	BCDEJNP
1646476	16 Wassell Ln.	16	283.6	3.1	7.6	KP
1646463	17 Wassell Ln.	17	509.7	5.3	5.8	KP
1646464	18 Wassell Ln.	18	684.5	4.4	5.2	LP
1644217	19 Wassell Ln.	19	260.8	2.6	8.0	DEJKP
1646489	20 Wassell Ln.	20	961.8	10.6	4.2	DJKP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Addison Army Housing Area  
Addison, Illinois 60101  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 13  
 Number of replicate pairs: 1  
 Highest reported result: 5.7  
 Lowest reported result: 0.9

Number of detectors returned: 11  
 Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643999	403 Army Trail Rd	403				KP [NR]
1645088	409 Army Trail Rd	409	329.2	3.7	7.1	D J K P
1645092	413 Army Trail Rd	413	896.9	4.9	4.4	K P
1643997	419 Army Trail Rd	419	514.9	5.7	5.7	B N P
1644027	403 Natoma	403	593.8	4.8	5.4	A K P
1644003	403 Natoma	403	635.9	5.2	5.2	A K P
1644024	404 Natoma	404	701.8	3.9	5.0	K P
1645086	410 Natoma	410	78.9	0.9	14.0	K P
1645087	411 Natoma	411	676.5	3.7	5.1	K P
1644002	414 Natoma	414	280.1	3.1	7.7	K P
0	415 Natoma	415				[ND]
1643991	420 Natoma	420	436.3	2.3	6.2	D E J K P
1643994	423 Natoma	423	349.6	1.9	6.9	K P

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Worth Army Housing Area  
Worth, Illinois 60463  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 13  
 Number of replicate pairs: 1  
 Highest reported result: 5.8  
 Lowest reported result: 1.1

Number of detectors returned: 11  
 Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1644020	MCA #01	01	208.2	2.3	8.8	KP
1647030	MCA #02	02	204.7	2.2	8.9	AKP
1647031	MCA #02	02	185.5	2.0	9.3	AKP
1644021	MCA #03	03	337.6	2.0	7.1	DJKP
1644004	MCA #04	04	341.7	3.6	7.2	KP
1644005	MCA #05	05	148.6	1.5	10.3	DEJKP
1647022	MCA #06	06	883.9	5.8	4.6	KP
1647036	MCA #07	07	139.9	1.1	10.6	DEJKP
1641506	MCA #08	08	170.2	1.9	10.0	KP
1647027	MCA #09	09	194.5	2.0	9.4	EKP
1644000	MCA #10	10				KP [NR]
1641508	MCA #11	11	120.6	1.3	11.3	KP
1641507	MCA #12	12				KP [NR]

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Croom Army Housing Area  
Croom, Maryland 01880  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 3  
 Number of detectors installed: 13  
 Number of replicate pairs: 1  
 Highest reported result: 4.9  
 Lowest reported result: 0.9

Number of detectors returned: 9  
 Number of outstanding detectors: 4

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643678	15470 Mt. Calvert Rd.	09A	231.0	1.8	8.4	LT
1643993	15472 Mt. Calvert Rd.	09B	368.6	2.7	6.8	MT
1643676	15474 Mt. Calvert Rd.	09C	227.9	1.7	8.4	KT
1643677	15476 Mt. Calvert Rd.	09D				A KT [NR]
1643685	15476 Mt. Calvert Rd.	09D				A KT [NR]
1643686	15478 Mt. Calvert Rd.	09E	90.9	0.6	12.3	MT
0	15484 Mt. Calvert Rd.	12A				[ND]
0	15486 Mt. Calvert Rd.	12B				[ND]
1643687	15488 Mt. Calvert Rd.	12C	668.3	4.9	5.1	BNT
1643688	15492 Mt. Calvert Rd.	04A	215.2	1.7	8.7	BNT
1647549	15494 Mt. Calvert Rd.	04B	78.1	0.6	15.4	BNT
1643680	15496 Mt. Calvert Rd.	04C	110.1	0.9	11.8	BNT
1647553	15498 Mt. Calvert Rd.	04D	125.9	1.0	11.1	BNT

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Bedford Army Housing Area  
Bedford, Massachusetts 01730  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 19  
Number of replicate pairs: 3  
Highest reported result: 3.6  
Lowest reported result: 0.3

Number of detectors returned: 16  
Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641159	01 Lewis Rd	01	38.2	0.4	18.0	BH KP
1641189	02 Lewis Rd	02	75.0	0.8	13.9	BKP
1641166	03 Lewis Rd	03				BKP[NR]
1641187	04 Lewis Rd	04				KP[NR]
1641196	05 Lewis Rd	05	129.3	1.2	11.3	ADJ KP
1641170	05 Lewis Rd	05	116.2	1.1	11.9	ADJ KP
1645785	06 Lewis Rd	06	170.2	1.8	10.0	KP
1641187	01 Mickelson Rd	1	215.2	2.4	8.7	BKP
1641160	02 Mickelson Rd	2	208.2	2.3	8.8	BKP
1641161	03 Mickelson Rd	3				BKP[NR]
1645784	04 Mickelson Rd	4	311.6	0.3	7.3	CDJ KP
1641171	05 Mickelson Rd	5	134.6	1.5	10.8	BNP
1641176	06 Mickelson Rd	6	199.5	2.2	9.0	BCJ NP
1641193	33 Pine Hill Rd	33	211.2	1.4	9.1	NP
1641172	35 Pine Hill Rd	35	205.7	2.3	9.2	AKP
1641175	35 Pine Hill Rd	35	167.9	1.8	9.8	AKP
1641168	37 Pine Hill Rd	37	418.5	3.6	6.4	ACDJ KP
1641179	37 Pine Hill Rd	37	376.5	3.3	6.7	ACDEJ KP
1641180	39 Pine Hill Rd	39	436.2	2.6	6.3	DEJ KP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Beverly Army Housing Area  
Beverly, Massachusetts 01915  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 17  
 Number of replicate pairs: 1  
 Highest reported result: 2.9  
 Lowest reported result: 1.2

Number of detectors returned: 9  
 Number of outstanding detectors: 8

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
0	40 Laurel St.	40				[ND]
0	41 Laurel St.	41				[ND]
1645807	42 Laurel St.	42	166.2	1.6	9.8	K P
0	43 Laurel St.	43				[ND]
0	44 Laurel St.	44				[ND]
1645817	45 Laurel St.	45	205.7	1.4	9.2	K P
0	46 Laurel St.	46				[ND]
1645793	47 Laurel St.	47	231.0	2.5	8.4	BCDEJ K P
1645773	48 Laurel St.	48	197.7	2.1	9.1	DJ K P
0	49 Laurel St.	49				[ND]
1645808	50 Laurel St.	50	80.3	2.9	13.5	EH K P
1642311	51 Laurel St.	51	452.6	2.5	6.1	K P
0	52 Laurel St.	52				[ND]
0	53 Laurel St.	53				[ND]
1645810	54 Laurel St.	54	129.4	1.3	11.0	ADJ K P
1645809	54 Laurel St.	54	124.1	1.2	11.2	ADJ K P
1645800	55 Laurel St.	55	203.0	1.6	8.9	BCDEJ K P

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Burlington Army Housing Area  
Burlington, Massachusetts 01803  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 13  
 Number of replicate pairs: 1  
 Highest reported result: 4.1  
 Lowest reported result: 0.9

Number of detectors returned: 5  
 Number of outstanding detectors: 8

Detector No.	Address	Unit No.	Exposure [pCi/L days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
0	113 South Bedford	113				[ND]
1641198	115 South Bedford	115	118.9	0.9	11.4	CDJKQ
1641184	117 South Bedford	117	430.8	4.1	6.3	KQ
1641181	119 South Bedford	119				AKQ [NR]
1641201	119 South Bedford	119				AKQ [NR]
1641167	121 South Bedford	121	264.3	2.0	7.9	CDJKQ
1641163	123 South Bedford	123	174.9	1.4	9.6	DEJKQ
0	125 South Bedford	125				[ND]
0	127 South Bedford	127				[ND]
0	129 South Bedford	129				[ND]
1641192	131 South Bedford	131	108.3	0.9	11.9	CDJKQ
0	133 South Bedford	133				[ND]
0	135 South Bedford	135				[ND]

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Hull Army Housing Area  
Hull, Massachusetts 02045  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 8  
 Number of detectors installed: 8  
 Number of replicate pairs: 0  
 Highest reported result: 1.1  
 Lowest reported result: 0.3

Number of detectors returned: 5  
 Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641202	1153 Nantasket	1153	66.3	0.7	14.6	B K P
0	1155 Nantasket	1155				[ND]
1641186	1157 Nantasket	1157	30.0	0.3		H K P U
0	1159 Nantasket	1159				[ND]
0	1161 Nantasket	1161				[ND]
1641169	1163 Nantasket	1163	87.3	0.8	13.0	D J K P
1643093	1165 Nantasket	1165	71.5	0.8	14.1	K P
1641157	1167 Nantasket	1167	132.9	1.1	10.8	C D E J K P

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Nahant Army Housing Area  
Nahant, Massachusetts 01908  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
Number of detectors installed: 13  
Number of replicate pairs: 1  
Highest reported result: 1.5  
Lowest reported result: 0.6

Number of detectors returned: 6  
Number of outstanding detectors: 7

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
0	294 Castle Rd	294				[ND]
1645782	296 Castle Rd	296				KQ [NR]
1645772	298 Castle Rd	298	64.5	0.6	14.7	DEJ KQ
1645783	300 Castle Rd	300				KQ [NR]
1645805	114 Gardiner Rd	114	145.1	1.5	10.4	CDJ KQ
1645781	116 Gardiner Rd	116	55.8	0.6	15.6	ADJ KQ
1645780	116 Gardiner Rd	116	66.3	0.7	14.6	ADJ KQ
1645804	001 Goddard Dr	1	68.0	0.6	14.4	CDEJ KQ
0	002 Goddard Dr	2				[ND]
1645774	003 Goddard Dr	3	131.1	1.4	10.9	E KQ
0	004 Goddard Dr	4				[ND]
0	005 Goddard Dr	5				[ND]
1645812	006 Goddard Dr	6				KQ [NR]

**\*Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Randolph Army Housing Area  
Randolph, Massachusetts 02368  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 17  
 Number of replicate pairs: 1  
 Highest reported result: 7.7  
 Lowest reported result: 1.2

Number of detectors returned: 12  
 Number of outstanding detectors: 5

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645822	01 Army St.	01	231.0	2.2	8.4	CDJKP
1641190	02 Army St.	02				AKP [NR]
1641162	02 Army St.	02	313.4	2.3	7.3	AKP
1641191	03 Army St.	03	138.1	1.5	10.7	DJKP
0	04 Army St.	04				[ND]
1641195	05 Army St.	05	395.7	3.2	6.7	EKP
1643099	06 Army St.	06	718.2	7.7	4.9	DEJKP
0	07 Army St.	07				[ND]
1641173	08 Army St.	08	111.8	1.2	11.7	DJKP
0	09 Army St.	09				[ND]
1645778	10 Army St.	10	215.0	2.2	9.0	DJKP
1641183	11 Army St.	11	330.5	2.2	7.3	KP
1645770	12 Army St.	12	259.7	2.6	8.2	CDEJKP
1641158	13 Army St.	13	120.6	1.2	11.3	DEJKP
0	14 Army St.	14				[ND]
1643094	15 Army St.	15	189.0	2.2	9.2	BENP
1641177	16 Army St.	16	618.7	3.4	5.3	CJKP

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Swansea Army Housing Area  
Swansea, Massachusetts 02777  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 16  
 Number of replicate pairs: 0  
 Highest reported result: 1.6  
 Lowest reported result: 0.3

Number of detectors returned: 5  
 Number of outstanding detectors: 11

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1644330	01 Missile Loop	01	31.2	0.3	19.2	CDJKP
0	02 Missile Loop	02				[ND]
1644331	03 Missile Loop	03	163.6	0.9	9.7	KP
1644327	04 Missile Loop	04	62.8	0.7	14.9	CDEJKP
0	05 Missile Loop	05				[ND]
1643095	06 Missile Loop	06	187.2	1.6	9.3	CDJKP
1643090	07 Missile Loop	07				KP [NR]
0	08 Missile Loop	08				[ND]
1643078	09 Missile Loop	09				KP [NR]
0	10 Missile Loop	10				[ND]
1644333	11 Missile Loop	11	71.5	0.7	14.1	DJKP
0	12 Missile Loop	12				[ND]
0	13 Missile Loop	13				[ND]
0	14 Missile Loop	14				[ND]
0	15 Missile Loop	15				[ND]
0	16 Missile Loop	16				[ND]

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Topsfield Army Housing Area  
Topsfield, Massachusetts 01983  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 16  
 Number of replicate pairs: 0  
 Highest reported result: 3.1  
 Lowest reported result: 1.2

Number of detectors returned: 12  
 Number of outstanding detectors: 4

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645786	01 Nike Village	01	131.1	1.4	10.9	K P
1645813	02 Nike Village	02	136.4	1.4	10.7	DE J K P
1645816	03 Nike Village	03	164.4	1.4	9.9	D J K P
1645795	04 Nike Village	04				K P [NR]
1645794	05 Nike Village	05	234.5	2.5	8.4	D J K P
1645792	06 Nike Village	06	198.2	1.3	9.3	K P
0	07 Nike Village	07				[ND]
1645790	08 Nike Village	08	108.3	1.2	11.9	BE K P
1645815	09 Nike Village	09	178.4	1.5	9.5	BD J K P
1645802	10 Nike Village	10				K P [NR]
1645801	11 Nike Village	11	152.2	1.5	10.2	D J K P
1645820	12 Nike Village	12	75.0	0.9	13.9	D J K P
1645788	13 Nike Village	13	285.3	3.1	7.6	B K P
1645814	14 Nike Village	14	293.2	2.0	7.8	B N P
1645787	15 Nike Village	15	192.6	1.3	9.4	DE J K P
0	16 Nike Village	16				[ND]

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Wakefield Army Housing Area  
Wakefield, Massachusetts 01880  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 12  
 Number of replicates: 0  
 Highest reported result: 1.9  
 Lowest reported result: 0.7

Number of detectors returned: 10  
 Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645776	091 Hopkins	091				KQ[NR]
1644320	099 Hopkins	099	113.6	0.9	11.6	DEJKQ
1644326	107 Hopkins	107	73.3	0.7	14.0	BCJNQ
1643085	002 Torrance	02	68.0	0.7	14.4	KQ
1643070	006 Torrance	06	85.6	0.9	13.1	KQ
1643079	007 Torrance	07	67.8	0.7	14.9	KQ
1643092	010 Torrance	10	115.4	1.3	11.5	KQ
1643089	011 Torrance	11	185.5	1.7	9.3	KQ
0	012 Torrance					[ND]
1643081	015 Torrance	15	180.2	1.9	9.4	DJKQ
1642332	016 Torrance	16	140.4	1.3	10.9	DJKQ
1644337	020 Torrance	20	69.6	0.7	14.7	BDJNQ

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Franklin Lakes Army Housing Area  
Franklin Lakes, New Jersey 07430  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 24  
Number of detectors installed: 26  
Number of replicate pairs: 2  
Highest reported result: 1.4  
Lowest reported result: 0.5

Number of detectors returned: 14  
Number of outstanding detectors: 12

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643652	213 Patrick Brems Dr.	213	112.5	1.2	12.0	LP
1643647	214 Patrick Brems Dr.	214	100.0	0.6	11.9	LP
1643648	215 Patrick Brems Dr.	215	71.5	0.5	14.6	LP
1643665	216 Patrick Brems Dr.	216	104.8	1.1	12.0	DJLP
1643651	217 Patrick Brems Dr.	217				NP[NR]
1643658	218 Patrick Brems Dr.	218	104.8	0.8	12.0	AKP
1643673	218 Patrick Brems Dr.	218	64.5	0.5	14.7	AKP
1643637	219 Patrick Brems Dr.	219				BNP[NR]
1643671	220 Patrick Brems Dr.	220				BNP[NR]
1643644	221 Patrick Brems Dr.	221	140.4	1.4	10.9	DJLP
1643667	222 Patrick Brems Dr.	222	85.6	0.9	13.1	DJLP
1643650	223 Patrick Brems Dr.	223	52.9	0.5	16.4	BNP
1643657	224 Patrick Brems Dr.	224				BNP[NR]
1645435	201 S. Brems Ct.	201				BGNP[NR]
0	202 S. Brems Ct.	202				[ND]
1643668	203 S. Brems Ct.	203				LP[NR]
1643664	204 S. Brems Ct.	204	71.5	0.7	14.1	LP
1643666	205 S. Brems Ct.	205				BNP[NR]
1643645	206 S. Brems Ct.	206				BNP[NR]
1643642	207 S. Brems Ct.	207	64.5	0.7	14.7	ADEJLP
1643653	207 S. Brems Ct.	207	48.8	0.5	16.4	ADEJLP
1643646	208 S. Brems Ct.	208	59.3	0.7	15.2	LP
1643643	209 S. Brems Ct.	209	62.8	0.6	14.9	DJKP
1643672	210 S. Brems Ct.	210				BNP[NR]
1647468	211 S. Brems Ct.	211				BGNP[NR]
1643654	212 S. Brems Ct.	212				LP[NR]

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Holmdel Army Housing Area  
Holmdel, New Jersey 07733  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
Number of detectors installed: 13  
Number of replicate pairs: 1  
Highest reported result: 3.3  
Lowest reported result: 0.5

Number of detectors returned: 11  
Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645885	201 Telegraph Rd	201	162.7	1.8	9.9	LP
1643641	202 Telegraph Rd	202	183.7	2.0	9.4	LP
1643238	203 Telegraph Rd	203	59.3	0.6	15.2	DJLP
1647467	204 Telegraph Rd	204	104.8	1.1	12.0	LP
1643662	205 Telegraph Rd	205				NP [NR]
1643240	206 Telegraph Rd	206	75.2	0.8	14.3	AKP
1643244	206 Telegraph Rd	206	103.1	1.0	12.1	AKP
1643640	207 Telegraph Rd	207	43.5	0.5	17.7	LP
1645884	208 Telegraph Rd	208				BGNP [NR]
1643242	209 Telegraph Rd	209	127.6	1.3	11.0	DEJLP
1643247	210 Telegraph Rd	210	185.9	1.2	9.2	LP
1643241	211 Telegraph Rd	211	175.8	1.9	9.9	LP
1643649	212 Telegraph Rd	212	315.3	3.3	7.2	LP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Livingston Army Housing Area  
East Hanover Twp., New Jersey 07936  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 32  
 Number of detectors installed: 35  
 Number of replicate pairs: 3  
 Highest reported result: 3.1  
 Lowest reported result: 0.4

Number of detectors returned: 22  
 Number of outstanding detectors: 13

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643670	201 Homung Ct.	01				BNP [NR]
1643243	202 Homung Ct.	02	148.6	1.6	10.3	HLP
1645434	203 Homung Ct.	03	174.9	1.8	9.6	LP
1645439	204 Homung Ct.	04	269.0	1.8	8.1	DELP
1643663	205 Homung Ct.	05				LP [NR]
1643675	206 Homung Ct.	06	185.5	2.0	9.3	LP
1645427	207 Homung Ct.	07	117.1	1.2	11.5	LP
1645925	208 Homung Ct.	08	82.1	0.8	13.4	LP
1645900	209 Homung Ct.	09				LP [NR]
1643661	210 Homung Ct.	10				BNP [NR]
1645898	211 Homung Ct.	11				LP [NR]
1645926	212 Homung Ct.	12				LP [NR]
1645908	213 Homung Ct.	13				BNP [NR]
1645423	214 Homung Ct.	14	121.8	1.3	11.6	LP
1645426	215 Homung Ct.	15	196.0	2.2	9.1	KP
1643245	216 Homung Ct.	16				GNP [NR]
1643246	217 Homung Ct.	17				BNP [NR]
1643674	218 Homung Ct.	18	157.2	1.1	10.4	ALP
1643660	218 Homung Ct.	18	229.9	1.6	8.7	ALP
1645902	219 Homung Ct.	19				BNP [NR]
1645923	220 Homung Ct.	20	111.8	1.1	11.7	LP
1645432	221 Homung Ct.	21				ALP [NR]
1645920	221 Homung Ct.	21	302.9	3.1	7.4	AELP
1645922	222 Homung Ct.	22	120.6	1.0	11.3	ADJLP
1645911	222 Homung Ct.	22	108.8	0.9	12.2	ADJLP
1645919	223 Homung Ct.	23	136.4	1.2	10.7	DJMP
1645431	224 Homung Ct.	24	113.6	1.1	11.6	KP
1645428	225 Homung Ct.	25				LP [NR]

**<sup>a</sup>Key to Remarks**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

Livingston Army Housing Area (Cont'd)  
East Hanover Twp., New Jersey 07936  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645928	226 Homung Ct.	26	117.1	1.3	11.5	CDJLP
1645430	227 Homung Ct.	27	144.2	1.4	10.8	LP
1645910	228 Homung Ct.	28				BGNP [NR]
1643669	229 Homung Ct.	29	113.6	1.2	11.6	BENP
1647473	230 Homung Ct.	30	151.6	1.6	10.5	DEJMP
1645918	231 Homung Ct.	31	92.6	1.0	12.7	LP
1645422	232 Homung Ct.	32	36.5	0.4	18.3	LP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Old Bridge Army Housing Area  
Old Bridge, New Jersey 08857  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 13  
 Number of replicate pairs: 1  
 Highest reported result: 1.2  
 Lowest reported result: 0.3

Number of detectors returned: 8  
 Number of outstanding detectors: 5

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643237	201 Jake Brown Rd.	201	45.2	0.4	15.6	ENP
1645424	202 Jake Brown Rd.	202				BGNP [NR]
1645906	203 Jake Brown Rd.	203	111.8	1.2	11.7	LP
1645904	204 Jake Brown Rd.	204	95.7	0.9	12.9	DEJKP
1643638	205 Jake Brown Rd.	205				ALP [NR]
1643656	205 Jake Brown Rd.	205				ALP [NR]
1645929	206 Jake Brown Rd.	206				NP [NR]
1643639	207 Jake Brown Rd.	207	73.3	0.6	14.0	DJLP
1645429	208 Jake Brown Rd.	208				LP [NR]
1643239	209 Jake Brown Rd.	209	66.3	0.7	14.6	DJKP
1643236	210 Jake Brown Rd.	210	54.0	0.6	15.8	KP
1643655	211 Jake Brown Rd.	211	54.0	0.6	15.8	DJLP
1645438	212 Jake Brown Rd.	212	56.2	0.3	14.6	DJLP

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Dry Hill Army Housing Area  
Watertown, New York 13601  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 27  
 Number of detectors installed: 28  
 Number of replicate pairs: 1  
 Highest reported result: 4.2  
 Lowest reported result: 0.3

Number of detectors returned: 21  
 Number of outstanding detectors: 7

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641567	239 Coughlan Dr.	239	94.3	2.4	12.6	AHKP
1643443	239 Coughlan Dr.	239	113.6	2.9	11.6	AHKP
1643439	240 Coughlan Dr.	240	384.5	4.2	6.8	KP
1641530	241 Coughlan Dr.	241	234.5	2.2	8.4	KP
1643452	235 Delavan Ave	235	151.6	1.3	10.5	DEJKP
1643450	236 Delavan Ave	236	95.7	0.9	12.9	KP
0	237 Delavan Ave	237				[ND]
1641564	238 Delavan Ave	238	180.2	2.0	9.4	KP
1643413	242 Delavan Ave	242	330.5	3.1	7.3	DEJKP
1641542	243 Delavan Ave	243	349.1	2.4	7.1	KP
1641561	232 Rathbun Dr.	232				KP[NR]
1643444	233 Rathbun Dr.	233	90.1	1.5	13.2	EKP
1641528	234 Rathbun Dr.	234				KP[NR]
1641554	255 Rathbun Dr.	255	37.9	0.6	18.6	DHJKP
0	257 Rathbun Dr.	257				[ND]
1641524	258 Rathbun Dr.	258	101.3	1.0	12.2	DJKP
1641563	244 Reardon Ave	244				KP[NR]
0	245 Reardon Ave.	245				[ND]
1643445	246 Reardon Ave.	246	269.0	3.0	8.1	KP
0	247 Reardon Ave.	247				[ND]
1641565	248 Reardon Ave.	248	278.3	2.9	7.7	EKP
1643420	249 Reardon Ave.	249	80.8	0.9	13.9	KP
1641562	250 Reardon Ave.	250	190.7	2.1	9.5	KP
1643422	251 Reardon Ave.	251	30.0	0.3		KPU
1643419	252 Reardon Ave.	252	162.7	1.7	9.9	KP
1643424	253 Reardon Ave.	253	30.0	0.3		KPU
1643421	254 Reardon Ave.	254	68.0	0.7	14.4	KP
1643446	256 Reardon Ave.	256	220.5	2.0	8.6	KP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Manhattan Beach Army Housing Area  
Brooklyn, New York 11235  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 9  
Number of detectors installed: 76  
Number of replicate pairs: 4  
Highest reported result: 0.6  
Lowest reported result: 0.2

Number of detectors returned: 31  
Number of outstanding detectors: 45

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645462	115A Quentin St.	115A	38.2	0.4	18.0	BNS
1643183	115B Quentin St.	115B				LS[NR]
1645459	116A Quentin St.	116A	30.0	0.3		DLSU[NR]
1648220	116B Quentin St.	116B				BNS[NR]
1645482	119A Quentin St.	119A				BNS[NR]
1645443	119B Quentin St.	119B	30.0	0.3		CDJLSU
1648172	120A Quentin St.	120A	36.5	0.4	18.3	LS
1645475	120B Quentin St.	120B	30.0	0.3		LSU
1648225	121A Quentin St.	121A				LS[NR]
1645476	121B Quentin St.	121B				BNS[NR]
1648217	122A Quentin St.	122A				GLS[NR]
0	122B Quentin St.	122B				[ND]
1645464	125A Quentin St.	125A				LS[NR]
1645473	125B Quentin St.	125B	41.7	0.4	17.4	DEJLS
1648219	126A Quentin St.	126A				GLS[NR]
1648145	126B Quentin St.	126B				LS[NR]
1648213	129A Quentin St.	129A				LS[NR]
1645471	129B Quentin St.	129B	34.2	0.4	19.2	KS
1645452	130A Quentin St.	130A				BNS[NR]
1648166	130B Quentin St.	130B	30.0	0.3		DJLSU
1645472	131A Quentin St.	131A				GLS[NR]
1645461	131B Quentin St.	131B	43.5	0.5	17.1	LS
0	132A Quentin St.	132A				[ND]
1645450	132B Quentin St.	132B				BNS[NR]
1645445	133A Quentin St.	133A	48.8	0.5	16.4	LS
1648140	133B Quentin St.	133B	34.7	0.4	18.6	LS
1648168	134A Quentin St.	134A	30.0	0.5		BHNSU
1645486	134B Quentin St.	134B				BNS[NR]
1645444	135A Quentin St.	135A				LS[NR]
1645446	135B Quentin St.	135B				GLS[NR]
1648139	136A Quentin St.	136A				LS[NR]
1648215	136B Quentin St.	136B				LS[NR]

**\*Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Manhattan Beach Army Housing Area (Cont'd)**  
**Brooklyn, New York 11235**  
**Indoor Radon Concentrations**

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks*
1648214	139 Quentin St.	139				BNS[NR]
1648138	140 Quentin St.	140	47.3	0.5	17.1	AMS
1648149	140 Quentin St.	140	30.0	0.3		AMSU
1645442	141 Quentin St.	141				MS[NR]
1643182	142 Quentin St.	142	30.0	0.3		LSU
1648155	145 Quentin St.	145				GKS[NR]
1645484	146 Quentin St.	146	37.9	0.2	18.6	LS
1648222	147 Quentin St.	147	30.0	0.2		LS
1648216	148 Quentin St.	148	30.0	0.3		LSU
1645470	149 Quentin St.	149				ANS[NR]
1645460	149 Quentin St.	149				ANS[NR]
1648167	150 Quentin St.	150	47.0	0.3	15.4	MS
1648221	151 Quentin St.	151	33.0	0.4	18.9	HLS
1648171	152 Quentin St.	152				LS[NR]
1648162	155 Quentin St.	155				LS[NR]
1648164	156 Quentin St.	156				LS[NR]
1648158	157 Quentin St.	157				LS[NR]
1645483	158 Quentin St.	158	30.0	0.5		DJNSU
1645485	162A Quentin St.	162A				ABNS[NR]
1645449	162A Quentin St.	162A				ABNS[NR]
1648153	162B Quentin St.	162B	41.7	0.5	17.4	LS
1648146	164A Quentin St.	164A				BNS[NR]
1645458	164B Quentin St.	164B	75.2	0.6	14.3	DEJLS
1648159	166A Quentin St.	166A	30.0	0.2		KSU
1648226	166B Quentin St.	166B				LS[NR]
1648174	170A Quentin St.	170A				BNS[NR]
1648165	170B Quentin St.	170B	31.2	0.4	19.2	DJLS
1648223	173A Quentin St.	173A				GLS[NR]
1645478	173B Quentin St.	173B				LS[NR]
1645448	174A Quentin St.	174A				GLS[NR]
1645447	174B Quentin St.	174B	32.4	0.3	19.6	DLS
1648152	175A Quentin St.	175A				AGLS[NR]
1648160	175A Quentin St.	175A				AGLS[NR]
1648161	175B Quentin St.	175B	32.4	0.4	19.6	LS
1648154	176A Quentin St.	176A				GLS[NR]
1645451	176B Quentin St.	176B				GLS[NR]
1643181	177A Quentin St.	177A				LS[NR]
1648173	177B Quentin St.	177B	30.0	0.3		BNS
1648170	178A Quentin St.	178A	30.0	0.3		LSU
1645463	178B Quentin St.	178B				BNS[NR]

## \*Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

Manhattan Beach Army Housing Area (Cont'd)  
Brooklyn, New York 11235  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1648163	181A Quentin St.	181A	30.0	0.3	-	DJLSU
1648224	181B Quentin St.	181B				BNS[NR]
1648137	182A Quentin St.	182A	30.0	0.2	-	LSU
1648157	182B Quentin St.	182B				GLS[NR]

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Rocky Point Army Housing Area  
Rocky Point, New York 11786  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 17  
Number of replicate pairs: 1  
Highest reported result: 2.1  
Lowest reported result: 0.8

Number of detectors returned: 10  
Number of outstanding detectors: 7

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645453	01 Defense Hill Rd	01				LP (NR)
1645474	02 Defense Hill Rd	02	118.1	1.3	11.8	LP
1645487	03 Defense Hill Rd	03				G K P (NR)
1645468	04 Defense Hill Rd	04	152.2	1.7	10.2	LP
1643184	05 Defense Hill Rd	05	108.3	1.2	11.9	A L P
1645465	05 Defense Hill Rd	05	73.3	0.8	14.0	A L P
1645481	06 Defense Hill Rd	06	108.8	1.2	12.2	D J L P
1645454	07 Defense Hill Rd	07				LP (NR)
1645469	08 Defense Hill Rd	08	125.9	1.3	11.1	K P
1645480	09 Defense Hill Rd	09				LP (NR)
1645456	10 Defense Hill Rd	10				LP (NR)
1648148	11 Defense Hill Rd	11	88.3	0.9	13.4	LP
1645467	12 Defense Hill Rd	12	226.1	1.5	8.8	LP
1648144	13 Defense Hill Rd	13				B N P (NR)
1645479	14 Defense Hill Rd	14	92.6	1.0	12.7	K P
1645441	15 Defense Hill Rd	15				B N P (NR)
1645466	16 Defense Hill Rd	16	190.7	2.1	9.5	LP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Spring Valley Army Housing Area  
Ramapo, New York 10977  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 13  
 Number of replicate pairs: 1  
 Highest reported result: 0.9  
 Lowest reported result: 0.3

Number of detectors returned: 9  
 Number of outstanding detectors: 4

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645889	201 Grandview Ave.	201	125.5	0.8	11.5	GKP
1645886	202 Grandview Ave.	202				BNP [NR]
1645873	203 Grandview Ave.	203	92.6	0.9	12.7	DJKP
1645888	204 Grandview Ave.	204				KP [NR]
1647465	205 Grandview Ave.	205				ALP [NR]
1647469	205 Grandview Ave.	205	47.0	0.5	16.7	ALP
1647466	206 Grandview Ave.	206	71.5	0.8	14.1	LP
1645890	207 Grandview Ave.	207	83.8	0.7	13.2	DJLP
1645872	208 Grandview Ave.	208	88.3	0.6	13.4	LP
1647470	209 Grandview Ave.	209	30.0	0.3		BNPU
1645870	210 Grandview Ave.	210	96.4	0.6	12.0	NP
1647475	211 Grandview Ave.	211				BNP [NR]
1645863	212 Grandview Ave.	212	78.9	0.5	14.0	LP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Tappan Army Housing Area  
Tappan, New York 10983  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 36  
Number of detectors installed: 39  
Number of replicate pairs: 3  
Highest reported result: 3.0  
Lowest reported result: 0.3

Number of detectors returned: 25  
Number of outstanding detectors: 14

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645887	423 Bogart Place	423				GKP [NR]
1645477	424 Bogart Place	424				LP [NR]
1645865	425 Bogart Place	425	30.5	0.3	20.0	LP
1645878	426 Bogart Place	426				LP [NR]
1645861	427 Bogart Place	427	80.3	0.9	13.5	LP
1645883	179 Greenbush Rd.	429	64.0	0.4	15.2	DJLP
1645866	185 Greenbush Rd.	430	75.0	0.8	13.9	LP
1645892	211 Greenbush Rd.	428	116.2	1.0	11.9	BNP
0	401 Lafayette St.	401				[ND]
1647476	402 Lafayette St.	402	121.8	1.1	11.6	DJLP
1647472	403 Lafayette St.	403	121.8	0.8	11.6	LP
1645880	404 Lafayette St.	404	125.5	0.8	11.5	DEJLP
1645874	405 Lafayette St.	405				KP [NR]
1645881	406 Lafayette St.	406				LP [NR]
1645894	407 Lafayette St.	407				NP [NR]
1645857	408 Lafayette St.	408	37.9	0.4	18.6	LP
1645896	409 Lafayette St.	409				BNP [NR]
1645877	410 Lafayette St.	410	68.0	0.7	14.4	LP
1645457	411 Lafayette St.	411				BNP [NR]
1645875	412 Lafayette St.	412	55.8	0.6	15.6	DJLP
1645871	413 Lafayette St.	413	82.1	0.7	13.4	ADGJKP
1648143	413 Lafayette St.	413	89.1	0.7	12.9	ADGJKP
1648141	414 Lafayette St.	414				BNP [NR]
1648142	415 Lafayette St.	415				GKP [NR]
1645858	416 Lafayette St.	416	58.0	0.6	14.4	LP
1647474	417 Lafayette St.	417	56.6	1.5	16.0	HLP
1645882	431 Lafayette St.	431	110.6	1.2	12.1	LP
1645893	432 Lafayette St.	432	86.4	0.9	13.5	AKP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

Tappan Army Housing Area (Cont'd)  
Tappan, New York 10983  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645860	432 Lafayette St.	432	55.8	0.5	15.6	AKP
1645876	433 Lafayette St.	433	38.2	0.3	18.0	DEJLP
1645879	434 Lafayette St.	434	56.2	0.6	15.8	DEJLP
1645867	435 Lafayette St.	435	97.6	1.0	12.8	LP
1648169	436 Lafayette St.	436	62.8	0.7	14.9	ALP
1648175	436 Lafayette St.	436	97.8	1.0	12.4	ALP
1645869	215 Western Hwy.	421				LP[NR]
1645859	221 Western Hwy.	420	69.6	0.5	14.7	LP
1645868	418 Western Hwy.	418				BNP[NR]
1645895	419 Western Hwy.	419				GKP[NR]
1645891	422 Western Hwy.	422	235.3	3.0	8.3	BNP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Coraopolis 71C Army Housing Area  
Robinson Twp., Pennsylvania 15108  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 7  
 Number of detectors installed: 8  
 Number of replicate pairs: 1  
 Highest reported result: 1.6  
 Lowest reported result: 0.7

Number of detectors returned: 7  
 Number of outstanding detectors: 1

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1436095	S118Q Ewings Mill Rd	118	101.0	1.1	11.4	DJKP
1436038	S119Q Ewings Mill Rd	119				KP [NR]
1436033	S120Q Ewings Mill Rd	120	83.5	0.9	12.6	KP
1436195	S121Q Ewings Mill Rd	121	148.4	1.6	9.8	DJKP
1436093	S122Q Ewings Mill Rd	122	83.5	0.9	12.2	DJKP
1436058	S123Q Ewings Mill Rd	123	78.3	0.7	12.5	CDJKP
1436037	S124Q Ewings Mill Rd	124	120.8	1.2	11.0	ADJKP
1436001	S124Q Ewings Mill Rd	124	109.8	1.1	11.0	ADJKP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Coraopolis 71L Army Housing Area  
Moon Twp., Pennsylvania 15108  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 5  
 Number of detectors installed: 5  
 Number of replicate pairs: 0  
 Highest reported result: 1.2  
 Lowest reported result: 1.2

Number of detectors returned: 2  
 Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1436197	S113Q Ewings Mill Rd.	113				B N P [NR]
1436075	S114Q Ewings Mill Rd.	114	153.6	1.2	9.7	B K P
1436203	S115Q Ewings Mill Rd.	115	106.3	1.2	11.2	K P
1436078	S116Q Ewings Mill Rd.	116				K P [NR]
1436016	S117Q Ewings Mill Rd.	117				K P [NR]

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Dorseyville Army Housing Area  
Dorseyville, Pennsylvania 15101  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 16  
 Number of replicate pairs: 0  
 Highest reported result: 4.0  
 Lowest reported result: 1.3

Number of detectors returned: 11  
 Number of outstanding detectors: 5

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1436002	S13Q Myers Ln.	13	129.2	1.4	10.4	KP
1436094	S14Q Myers Ln.	14				BKP [NR]
1436087	S15Q Myers Ln.	15	251.8	2.6	7.8	KP
1436089	S16Q Myers Ln.	16	158.9	1.7	9.5	BENP
1436046	S17Q Myers Ln.	17	195.3	2.1	9.0	KP
1436072	S18Q Myers Ln.	18	125.6	1.3	10.5	KP
1436065	S19Q Myers Ln.	19	190.4	1.5	8.8	DEJKP
1436063	S20Q Myers Ln.	20	285.1	3.1	7.4	KP
1436028	S21Q Myers Ln.	21	307.1	2.2	7.4	EKP
0	S22Q Myers Ln.	22				[ND]
1436000	S23Q Myers Ln.	23	372.7	4.0	6.6	DEJKP
0	S24Q Myers Ln.	24				[ND]
0	S25Q Myers Ln.	25				[ND]
1436007	S26Q Myers Ln.	26	227.0	1.6	8.5	BKP
1436019	S27Q Myers Ln.	27	161.7	1.5	9.8	DEJKP
0	S28Q Myers Ln.	28				[ND]

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Elizabeth Army Housing Area  
Elizabeth, Pennsylvania 15037  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 12  
 Number of replicate pairs: 0  
 Highest reported result: 12.3  
 Lowest reported result: 1.2

Number of detectors returned: 7  
 Number of outstanding detectors: 5

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643222	S73Q Route #4	73	122.4	1.2	11.3	KQ
1643210	S74Q Route #4	74	174.0	1.6	9.9	BCDJLP
0	S75Q Route #4	75				[ND]
1643189	S76Q Route #4	76	106.6	1.2	12.0	KP
1643188	S77Q Route #4	77	323.0	3.5	7.4	KP
1643232	S78Q Route #4	78				KP [NR]
0	S80Q Route #4	79				[ND]
0	S80Q Route #4	80				[ND]
1643199	S81Q Route #4	81	181.9	2.0	9.4	EKP
1643211	S82Q Route #4	82	282.0	3.0	7.9	BLP
1643212	S83Q Route #4	83				BNP [NR]
1643086	S84Q Route #4	84	1252.7	12.3	3.7	DJKP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Elrama Army Housing Area  
Elrama, Pennsylvania 15332  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 16  
Number of replicate pairs: 0  
Highest reported result: 20.2  
Lowest reported result: 0.8

Number of detectors returned: 13  
Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643214	S085Q Route #4	85	1612.0	20.2	3.3	KP
1643200	S086Q Route #4	86	1037.2	11.4	4.1	EKP
1643229	S087Q Route #4	87				KP [NR]
1643235	S088Q Route #4	88	108.3	1.4	11.9	HKP
1643228	S089Q Route #4	89	211.7	2.1	8.8	BDEJKP
1643195	S090Q Route #4	90				BNP [NR]
1643204	S091Q Route #4	91	185.5	1.8	9.3	KP
1643223	S092Q Route #4	92	330.5	2.3	7.3	BKP
1643226	S093Q Route #4	93				KP [NR]
1643216	S094Q Route #4	94	243.3	2.7	8.2	BKP
1643187	S095Q Route #4	95	234.5	2.5	8.4	DJKP
1643230	S096Q Route #4	96	281.8	3.1	7.7	BKP
1643201	S097Q Route #4	97	134.6	1.4	10.8	DJKP
1644323	S098Q Route #4	98	178.4	2.0	9.5	EKP
1643202	S099Q Route #4	99	69.8	0.8	14.3	KP
1643219	S100Q Route #4	100	80.3	0.9	13.5	BDJKP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

Finleyville Army Housing Area  
Finleyville, Pennsylvania 15332  
Indoor Radon Concentrations

## Summary:

Number of residential structures: 12  
Number of detectors installed: 12  
Number of replicate pairs: 0  
Highest reported result: 3.0  
Lowest reported result: 0.9

Number of detectors returned: 10  
Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks*
1643231	S101Q Route #4	101	288.9	3.0	7.6	KQ
1643227	S102Q Route #4	102	167.9	1.8	9.8	DEJKP
1643220	S103Q Route #4	103	164.4	1.5	9.9	DEJKP
1643185	S104Q Route #4	104	127.6	1.4	11.0	KP
1643203	S105Q Route #4	105	141.6	1.4	10.5	DJKP
1643215	S106Q Route #4	106	157.4	1.4	10.1	CDEJKP
1643233	S107Q Route #4	107	211.7	1.7	8.8	BELP
1643197	S108Q Route #4	108	134.6	1.2	10.8	BDEJKP
1643190	S109Q Route #4	109	115.4	1.1	11.5	DEJKP
1643198	S110Q Route #4	110				KP [NR]
1643221	S111Q Route #4	111				KP [NR]
1643194	S112Q Route #4	112	76.8	0.9	13.7	BDEJKP

## \*Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Herminie Army Housing Area  
Herminie, Pennsylvania 15642  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 17  
 Number of replicate pairs: 1  
 Highest reported result: 18.0  
 Lowest reported result: 0.9

Number of detectors returned: 15  
 Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1436032	S57Q Mars Hill Rd.	57	128.2	0.9	10.7	KP
1643208	S58Q Mars Hill Rd.	58	375.2	4.1	6.9	AEKP
1644339	S58Q Mars Hill Rd.	58	324.9	3.6	7.4	AKP
1644338	S59Q Mars Hill Rd.	59	182.3	1.1	9.3	DJKP
1643196	S60Q Mars Hill Rd.	60	1128.0	9.8	4.0	DEJKP
1643191	S61Q Mars Hill Rd.	61	125.9	1.3	11.1	KP
0	S62Q Mars Hill Rd.	62				[ND]
1643205	S63Q Mars Hill Rd.	63	304.7	1.9	7.4	BNP
1643224	S64Q Mars Hill Rd.	64	1636.5	18.0	3.3	KP
1643206	S65Q Mars Hill Rd.	65	232.8	2.5	8.4	BKP
1643213	S66Q Mars Hill Rd.	66	282.7	4.3	6.8	BLP
1643192	S67Q Mars Hill Rd.	67	104.8	1.0	12.0	KP
1643225	S68Q Mars Hill Rd.	68	164.4	1.8	9.9	KP
1643234	S69Q Mars Hill Rd.	69	134.8	0.9	11.1	KP
0	S70Q Mars Hill Rd.	70				[ND]
1643186	S71Q Mars Hill Rd.	71	127.4	1.0	11.4	KP
1643218	S72Q Mars Hill Rd.	72	367.7	3.3	6.8	BNP

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Irwin Army Housing Area  
Irwin, Pennsylvania 15642  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
 Number of detectors installed: 17  
 Number of replicate pairs: 1  
 Highest reported result: 3.3  
 Lowest reported result: 1.0

Number of detectors returned: 10  
 Number of outstanding detectors: 7

Detector No.	Address	Unit No.	Exposure [pCi/L days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks*
1436083	S41Q Rd. 11	41	125.6	1.4	10.5	BDJKP
1436069	S42Q Rd. 11	42	154.3	1.7	10.0	AKP
1643193	S42Q Rd. 11	42	178.4	2.0	9.5	AKP
1436013	S43Q Rd. 11	43	303.4	3.3	7.4	BKP
1436030	S44Q Rd. 11	44				KP [NR]
1436054	S45Q Rd. 11	45	76.5	1.2	12.6	BH KP
1643217	S46Q Rd. 11	46				KP [NR]
1436011	S47Q Rd. 11	47	108.0	1.0	11.1	BDJKP
1436034	S48Q Rd. 11	48				KP [NR]
0	S49Q Rd. 11	49				[ND]
1436050	S50Q Rd. 11	50	251.8	2.0	7.8	DJ KP
1436066	S51Q Rd. 11	51	137.5	1.5	10.4	BDEJKP
1436082	S52Q Rd. 11	52				KP [NR]
1436194	S53Q Rd. 11	53	207.9	3.2	8.5	BDEHJKP
1436009	S54Q Rd. 11	54	122.1	1.3	10.6	DJLP
0	S55Q Rd. 11	55				[ND]
0	S56Q Rd. 11	56				[ND]

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Monroeville Army Housing Area  
Monroeville, Pennsylvania 15239  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 12  
 Number of replicate pairs: 0  
 Highest reported result: 2.7  
 Lowest reported result: 0.8

Number of detectors returned: 11  
 Number of outstanding detectors: 1

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1436202	S29Q Rd 2	29	115.1	1.3	10.8	BKQ
1436056	S30Q Rd 2	30	137.8	2.0	10.1	BHKP
1436048	S31Q Rd 2	31				BKP [NR]
1436029	S32Q Rd 2	32	124.5	1.3	10.8	DJKP
1436018	S33Q Rd 2	33	126.3	1.1	10.8	DJKP
1436006	S34Q Rd 2	34	71.2	0.8	12.4	BKP
1436201	S35Q Rd 2	35	99.3	1.1	11.5	BKP
1436092	S36Q Rd 2	36	152.4	1.6	10.0	BEKP
1436071	S37Q Rd 2	37	143.1	1.6	10.3	BKP
1436199	S38Q Rd 2	38	243.0	2.7	8.0	BKP
1436043	S39Q Rd 2	39	211.4	2.3	8.5	BKP
1436064	S40Q Rd 2	40	134.3	1.3	10.2	BKP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Rural Ridge Army Housing Area  
Rural Ridge, Pennsylvania 15024  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 12  
 Number of detectors installed: 12  
 Number of replicate pairs: 0  
 Highest reported result: 2.3  
 Lowest reported result: 0.8

Number of detectors returned: 8  
 Number of outstanding detectors: 4

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1436196	S01Q Crawford Run Rd	01	150.1	1.5	9.8	B K P
1436012	S02Q Crawford Run Rd	02	67.7	1.2	13.1	B H K P
1436026	S03Q Crawford Run Rd	03	162.4	1.8	9.4	B K P
0	S04Q Crawford Run Rd	04				[ND]
0	S05Q Crawford Run Rd	05				[ND]
1436041	S06Q Crawford Run Rd	06	120.8	1.3	11.0	K P
1436010	S07Q Crawford Run Rd	07				K P [NR]
1436003	S08Q Crawford Run Rd	08	123.2	0.8		D J K P
1436027	S09Q Crawford Run Rd	09	209.1	1.3		D E J K P
1436005	S10Q Crawford Run Rd	10				K P [NR]
1436068	S11Q Crawford Run Rd	11	202.7	2.3	8.6	K P
1436020	S12Q Crawford Run Rd	12	173.8	1.2	9.3	K P

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Davisville Army Housing Area  
North Kingston, Rhode Island 02852  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 21  
 Number of detectors installed: 63  
 Number of replicate pairs: 1  
 Highest reported result: 1.9  
 Lowest reported result: 0.3

Number of detectors returned: 42  
 Number of outstanding detectors: 21

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1647492	01 Navy	01	65.9	0.5	15.1	ENS
1647491	02 Navy	02				BNS [NR]
1642341	03 Navy	03				BNS [NR]
1647489	04 Navy	04				BNS [NR]
1643075	05 Navy	05	68.0	0.7	14.4	BENS
1642327	06 Navy	06	73.4	0.9	14.4	DJNS
1642336	07 Navy	07	68.0	0.7	14.4	DEJNS
1642328	08 Navy	08	122.4	0.9	11.3	NS
0	09 Navy	09				[ND]
1647478	10 Navy	10	48.8	0.5	16.4	NS
1642342	11 Navy	11				LS [NR]
1642348	12 Navy	12	71.5	0.5	14.6	ENS
0	13 Navy	13				[ND]
1642312	14 Navy	14				NS [NR]
0	15 Navy	15				[ND]
1647483	16 Navy	16	51.0	0.4	16.7	DJNS
1642340	17 Navy	17	99.4	1.0	12.7	DEJLS
1647481	18 Navy	18	82.1	0.9	13.4	NS
1642344	19 Navy	19				BLS [NR]
1642345	20 Navy	20	181.4	1.3	9.7	EMS
0	21 Navy	21				[ND]
1642346	22 Navy	22	85.6	0.9	13.1	DJNS
1642339	23 Navy	23	76.8	0.8	13.7	MS
1642320	24 Navy	24				NS [NR]
1642338	25 Navy	25	58.4	0.5	15.8	EMS
1647485	27 Navy	27	122.4	1.4	11.3	MS
0	29 Navy	29				[ND]
1642343	31 Navy	31	116.5	0.7	11.2	LS

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

Daviessville Army Housing Area (Cont'd)  
North Kingston, Rhode Island 02852  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1642337	33 Navy	33				MS [NR]
1643080	35 Navy	35	211.7	1.9	8.8	BENS
1642318	36 Navy	36	166.2	1.3	9.8	DJNS
1643074	37 Navy	37	52.3	0.5	16.0	MS
1642319	38 Navy	38	88.3	0.9	13.4	DJNS
1642334	39 Navy	39	101.3	0.8	12.2	DJMS
0	40 Navy	40				[ND]
1642325	41 Navy	41	106.9	1.2	12.3	MS
1647484	42 Navy	42	51.0	0.6	16.7	LS
1647480	43 Navy	43	85.9	0.5	12.5	LS
1647482	44 Navy	44	99.4	1.1	12.7	NS
0	45 Navy	45				[ND]
1647477	46 Navy	46	54.7	0.3	16.2	DJNS
1643073	47 Navy	47	78.9	0.8	14.0	DJKS
0	48 Navy	48				[ND]
1642349	49 Navy	49	50.5	0.5	16.2	MS
1642331	50 Navy	50	76.8	0.8	13.7	ANS
1642333	50 Navy	50	69.8	0.8	14.3	ANS
1642351	51 Navy	51	113.6	0.9	11.6	MS
1642322	52 Navy	52	73.3	0.8	14.0	NS
1641199	53 Navy	53	67.8	0.6	14.9	MS
1647490	54 Navy	54				NS [NR]
0	55 Navy	55				[ND]
1647479	56 Navy	56	65.9	0.7	15.1	DJNS
1644319	57 Navy	57	57.5	0.6	15.4	MS
1642329	58 Navy	58	82.7	0.9	13.7	DEJNS
1647488	59 Navy	59	179.6	1.2	9.8	DJLS
1642330	60 Navy	60	52.3	0.6	16.0	DJNS
0	61 Navy	61				[ND]
1641200	62 Navy	62	89.1	1.0	12.9	NS
0	63 Navy	63				[ND]
1643069	64 Navy	64	97.6	0.9	12.8	DEJNS
1642335	65 Navy	65	51.0	0.7	16.7	HLS
0	66 Navy	66				[ND]
1647486	67 Navy	67	69.8	0.8	14.3	BMS

## \*Key to Remarks:

- A Duplicate detectors
- B Detector placed by occupant of DEH
- C Starting date unknown
- D Ending date unknown
- E Detector received with no seal
- F No data sheet
- G Unoccupied house
- H Exposure < 90 days
- J Exact duration of exposure unknown; concentration estimated
- K Detector in bedroom

- L Detector in living room
- M Detector in kitchen
- N Detector location unknown
- P Capehart home
- Q MCA home
- R Duplex (one-story) home
- S Duplex (multistory) home
- T Apartment building
- U Below detection limit
- [ND] No data
- [NR] Not returned

**Slatersville Army Housing Area  
North Smithfield, Rhode Island 02895  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 16  
Number of detectors installed: 19  
Number of replicate pairs: 3  
Highest reported result: 2.9  
Lowest reported result: 0.8

Number of detectors returned: 17  
Number of outstanding detectors: 2

Detector No.	Address	Unit No.	Exposure (pCi/L days)	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645798	1001 Pound Hill Rd.	01	138.1	1.5	10.7	DEJKP
1642324	1002 Pound Hill Rd.	02	211.7	1.7	8.8	KP
0	1003 Pound Hill Rd.	03				[ND]
1643083	1004 Pound Hill Rd.	04	341.7	2.9	7.2	DJKP
1643088	1005 Pound Hill Rd.	05	82.7	0.8	13.7	DJKP
1643098	1006 Pound Hill Rd.	06	259.7	2.7	8.2	ADJKP
1643097	1006 Pound Hill Rd.	06	187.2	1.9	9.3	ADJKP
1643084	1007 Pound Hill Rd.	07	246.8	2.7	8.2	AKP
1643077	1007 Pound Hill Rd.	07	255.6	2.8	8.0	AKP
1643071	1008 Pound Hill Rd.	08	157.4	1.6	10.1	DJKP
1644329	1009 Pound Hill Rd.	09	78.9	0.8	14.0	BDEJNP
1643087	1010 Pound Hill Rd.	10	139.9	1.3	10.6	DJKP
1643082	1011 Pound Hill Rd.	11				KP [NR]
1643096	1012 Pound Hill Rd.	12	174.9	1.9	9.6	EKP
1645777	1013 Pound Hill Rd.	13	103.1	1.1	12.1	ADJKP
1641185	1013 Pound Hill Rd.	13	86.4	0.9	13.5	ADJKP
1642326	1014 Pound Hill Rd.	14	111.8	1.1	11.7	NP
1643100	1015 Pound Hill Rd.	15	117.1	1.2	11.5	BNP
1643076	1016 Pound Hill Rd.	16	118.1	1.3	11.8	DJKP

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Manassas Army Housing Area  
Manassas, Virginia 22111  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 9  
Number of detectors installed: 10  
Number of replicate pairs: 1  
Highest reported result: 1.8  
Lowest reported result: 0.7

Number of detectors returned: 4  
Number of outstanding detectors: 6

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
0	7801 Arden Rd	1				[ND]
1647554	7801 Arden Rd	2	111.8	1.8	11.7	H K Q
0	7801 Arden Rd	3				[ND]
0	7801 Arden Rd	4				[ND]
1643681	7801 Arden Rd	5	108.8	1.0	12.2	A D J K Q
1643689	7801 Arden Rd	5	75.0	0.7	13.9	A D J K Q
0	7801 Arden Rd	6				[ND]
1643691	7801 Arden Rd	7				K P [NR]
1647545	7801 Arden Rd	8	113.6	1.3	11.6	K P
1643684	7801 Arden Rd	9				K P [NR]

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Patrick Henry Army Housing Area  
Newport News, Virginia 23602  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 14  
 Number of detectors installed: 15  
 Number of replicate pairs: 1  
 Highest reported result: 5.4  
 Lowest reported result: 0.5

Number of detectors returned: 6  
 Number of outstanding detectors: 9

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1647541	Unit #01	1	285.6	3.0	•	K P
0	Unit #02	2				[ND]
1647558	Unit #03	3	189.8	2.0	•	A K P
1647561	Unit #03	3	209.7	2.2	•	A K P
1647562	Unit #04	4				K P [NR]
0	Unit #05	5				[ND]
1647564	Unit #06	6				K P [NR]
1647567	Unit #07	7	95.9	1.0	•	K P
0	Unit #08	8				[ND]
1647557	Unit #09	9	504.4	5.4	5.8	K P
1647556	Unit #10	10				K P [NR]
0	Unit #11	11				[ND]
0	Unit #12	12				[ND]
0	Unit #13	13				[ND]
1647555	Unit #14	14	48.9	0.5	•	K P

<sup>a</sup>No standard deviations reported

**\*Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Woodbridge Army Housing Area  
Woodbridge, Virginia 22191  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 2  
 Number of detectors installed: 11  
 Number of replicate pairs: 1  
 Highest reported result: 2.3  
 Lowest reported result: 0.7

Number of detectors returned: 8  
 Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1647566	14000 Dawson Beach Rd.		123.7	0.9	11.5	AKT
1643690	14000 Dawson Beach Rd.		138.6	1.0	11.0	AKT
1647563	14002 Dawson Beach Rd.					LT[NR]
1647559	14004 Dawson Beach Rd.		149.8	1.1	10.6	LT
1643682	14006 Dawson Beach Rd.		116.5	0.7	11.2	ELT
1647547	14008 Dawson Beach Rd.		140.4	1.0	10.9	KT
1647544	14010 Dawson Beach Rd.		120.6	1.4	11.3	KT
1647570	14011 Dawson Beach Rd.					KR[NR]
1644110	14012 Dawson Beach Rd.		78.9	0.9	14.0	BLT
1644095	14013 Dawson Beach Rd.		254.1	2.3	8.3	DEJKR
0	14014 Dawson Beach Rd.					[ND]

**<sup>a</sup>Key to Remarks:**

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

**Midway Army Housing Area  
Kent, Washington 98032  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 32  
 Number of detectors installed: 34  
 Number of replicate pairs: 2  
 Highest reported result: 1.8  
 Lowest reported result: 0.4

Number of detectors returned: 25  
 Number of outstanding detectors: 9

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645136	m-01 Avenue B	m-1				KP (NR)
1645110	m-02 Avenue B	m-2	54.0	0.6	15.8	KP
1645112	m-03 Avenue B	m-3	101.3	1.1	12.2	KP
1645135	m-04 Avenue B	m-4	62.2	0.7	15.4	KP
1645126	m-05 Avenue B	m-5	78.5	0.8	13.6	ADEJKP
1645139	m-05 Avenue B	m-5	64.5	0.7	14.7	ADEJKP
1645109	m-06 Avenue B	m-6				KP (NR)
1644012	m-07 Avenue B	m-7	90.8	1.0	12.8	KP
1645119	m-08 Avenue B	m-8	106.6	1.1	12.0	KP
1644016	m-09 Avenue B	m-9	66.3	0.7	14.6	AEKP
1644015	m-09 Avenue B	m-9	76.8	0.8	13.7	AEKP
1645085	m-10 Avenue B	m-10	142.3	1.6	10.8	KP
1645125	m-11 Avenue B	m-11				KP (NR)
1645116	m-12 Avenue B	m-12	69.8	0.8	14.3	KP
1645129	m-13 Avenue B	m-13				KP (NR)
1645143	m-14 Avenue B	m-14	52.9	0.6	16.4	KP
1645141	m-15 Avenue B	m-15				KP (NR)
1645104	m-16 Avenue B	m-16	92.6	1.1	12.7	KP
1645107	m-17 Avenue B	m-17	97.6	1.1	12.8	DEJKP
1644008	m-18 Avenue B	m-18	166.5	1.8	10.1	KP
1645123	m-19 Avenue B	m-19	92.6	0.9	12.7	KP
1645142	m-20 Avenue B	m-20	84.5	0.9	13.6	KP
1644030	m-21 Avenue B	m-21				KP (NR)
1645101	m-22 Avenue B	m-22	200.1	1.3	9.3	KP
1644013	m-23 Avenue B	m-23				KP (NR)
1644009	m-24 Jeffrey Rd.	m-24	103.1	1.0	12.1	DEJNP
1645118	m-25 Jeffrey Rd.	m-25				KP (NR)
1645124	m-26 Jeffrey Rd.	m-26	69.8	0.7	14.3	DJKP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
 B Detector placed by occupant of DEH  
 C Starting date unknown  
 D Ending date unknown  
 E Detector received with no seal  
 F No data sheet  
 G Unoccupied house  
 H Exposure < 90 days  
 J Exact duration of exposure unknown; concentration estimated  
 K Detector in bedroom

L Detector in living room  
 M Detector in kitchen  
 N Detector location unknown  
 P Capehart home  
 Q MCA home  
 R Duplex (one-story) home  
 S Duplex (multistory) home  
 T Apartment building  
 U Below detection limit  
 [ND] No data  
 [NR] Not returned

Midway Army Housing Area (Cont'd)  
Kent, Washington 98032  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645108	m-27 Jeffrey Rd.	m-27				KP (NR)
1645114	m-28 Jeffrey Rd.	m-28	77.1	0.7	14.1	KP
1645137	m-29 Jeffrey Rd.	m-29	117.1	1.2	11.5	KP
1645113	m-30 Jeffrey Rd.	m-30	87.3	0.9	13.0	KP
1645138	m-31 Jeffrey Rd.	m-31	41.7	0.4	18.0	DJKP
1645115	m-32 Jeffrey Rd.	m-32	82.1	0.9	13.4	KP

<sup>a</sup>Key to Remarks:

A Duplicate detectors  
B Detector placed by occupant of DEH  
C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Youngs Lake Army Housing Area  
Renton, Washington 98055  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 28  
Number of detectors installed: 31  
Number of replicate pairs: 3  
Highest reported result: 1.2  
Lowest reported result: 0.3

Number of detectors returned: 26  
Number of outstanding detectors: 5

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1645105	L-01	L-1	30.0	0.3		KQU
1645106	L-02	L-3	54.0	0.5	15.8	KQ
1645099	L-03	L-3	54.0	0.5	15.8	KQ
1645097	L-04	L-4	57.5	0.6	15.4	KQ
1645098	L-05	L-5	41.7	0.5	17.4	KQ
1645131	L-06	L-6	37.9	0.4	18.6	DJKQ
1645096	L-07	L-7	48.9	0.5	16.7	KQ
1645089	L-08	L-8				KQ [NR]
1645094	L-09	L-9	73.3	0.6	14.0	EKP
1645095	L-10	L-10	30.5	0.3	20.0	KPU
1645117	L-11	L-11	30.0	0.3		KPU
1645093	L-12	L-12	30.0	0.3		EKPU
1645132	L-13	L-13	49.1	0.5	16.9	KP
1644010	L-14	L-14	51.0	0.5	16.7	KP
1645128	L-15	L-15	30.0	0.3		KPU
1645127	L-16	L-16	55.8	0.7	15.6	HKQ
1645102	L-17	L-17	111.8	1.2	11.7	KQ
1644017	L-18	L-18				KQ [NR]
1644019	L-19	L-19				KQ [NR]
1645133	L-20	L-20				AKQ [NR]
1645103	L-20	L-20				AKQ [NR]
1645122	L-21	L-21	66.3	0.7	14.6	KQ
1644011	L-22	L-22	80.3	0.9	13.5	AKQ
1644014	L-22	L-22	30.0	0.3		AKQU
1645140	L-23	L-23	77.1	0.9	14.1	KQ
1644031	L-24	L-24	83.8	0.9	13.2	DJKQ
1645121	L-25	L-25	59.3	0.5	15.2	AKQ
1645100	L-25	L-25	71.5	0.6	14.1	AKQ
1645130	L-26	L-26	60.3	0.7	15.6	DJKQ
1645134	L-27	L-27	71.5	0.8	14.1	DJKQ
1645120	L-28	L-28	40.0	0.3	17.7	ELP

**\*Key to Remarks:**

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C Starting date unknown  
D Ending date unknown  
E Detector received with no seal  
F No data sheet  
G Unoccupied house  
H Exposure < 90 days  
J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Sun Prairie Army Housing Area  
Sun Prairie, Wisconsin 53590  
Indoor Radon Concentrations**

**Summary:**

Number of residential structures: 76  
Number of detectors installed: 118  
Number of replicate pairs: 8  
Highest reported result: 17.4  
Lowest reported result: 1.0

Number of detectors returned: 115  
Number of outstanding detectors: 3

Detector No.	Address	Unit No.	Exposure [pCi/L days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1641504	086 Andrews Dr.	1114	298.8	3.3	7.7	KR
1643996	117 Andrews Dr.	1122	220.6	2.4	8.9	KR
1644023	119 Andrews Dr.	1106	216.8	2.4	8.9	KR
1647587	095 Ent Dr.	1105	351.9	3.9	6.9	KR
1644107	095 Ent Dr.	1109	162.8	1.8	10.2	KR
1644106	096 Ent Dr.	1113				KR[NR]
1647585	096 Ent Dr.	1117	222.3	2.5	8.6	AKR
1643122	096 Ent Dr.	1117	201.2	2.3	9.0	AKR
1647584	097 Ent Dr.	1201	287.6	3.2	7.8	KR
1646992	097 Ent Dr.	1205	148.6	1.7	10.3	KR
1646999	098 Ent Dr.	1209	125.9	1.4	11.1	KR
1647009	098 Ent Dr.	1213	224.0	2.5	8.5	KR
1644113	099 Ent Dr.	1217	311.9	3.5	7.5	KR
1643134	099 Ent Dr.	1221	520.6	5.8	5.9	KR
1646979	100 Ent Dr.	1220	231.7	2.6	8.7	KR
1643121	100 Ent Dr.	1224	265.3	3.0	8.1	AKR
1644108	100 Ent Dr.	1224	206.5	2.3	8.9	AKR
1647588	101 Ent Dr.	1212	276.5	2.9	8.0	KR
1641509	101 Ent Dr.	1216	367.7	4.0	6.8	KR
1647586	102 Ent Dr.	1202	572.7	6.4	5.6	KR
1647033	102 Ent Dr.	1208	309.9	3.4	7.3	KR
1646996	103 Ent Dr.	1118	216.8	2.4	8.9	KR
1647004	103 Ent Dr.	1122	278.3	3.0	8.0	KR
1646997	104 Ent Dr.	1110	227.5	2.5	8.5	KR
1643123	104 Ent Dr.	1114	364.0	4.1	7.0	KR
1641505	105 Ent Dr.	1102	162.8	1.8	10.2	EKR
1647007	105 Ent Dr.	1106	151.6	1.6	10.5	DJKR
1647011	147 Fairchild	1001	434.3	4.8	6.2	AKR
1643130	147 Fairchild	1001	323.9	3.6	7.2	AKR
1647021	148 Fairchild	1009	198.2	2.2	9.3	DJKP
1647023	149 Fairchild	1017	326.8	3.6	7.4	KP
1647006	150 Fairchild	1101	194.2	5.9	9.1	DHJKP

**\*Key to Remarks:**

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J Exact duration of exposure unknown; concentration estimated  
K Detector in bedroom

L Detector in living room  
M Detector in kitchen  
N Detector location unknown  
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R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

Sun Prairie Army Housing Area (Cont'd)  
Sun Prairie, Wisconsin 53590  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1646988	151 Fairchild	1109	206.5	2.3	8.9	KP
1646994	138 Harmon Cir.	1134	308.1	3.4	7.6	KP
1644022	139 Harmon Cir.	1126	298.8	3.3	7.7	KP
1643988	140 Harmon Cir.	1118	321.2	3.5	7.4	KP
1647032	141 Harmon Cir.	1110	259.1	2.9	8.0	KP
1643990	142 Harmon Cir.	1102	211.2	2.3	9.1	KP
1643109	143 Harmon Cir.	1101	442.3	4.8	6.4	DJKP
1647015	144 Harmon Cir.	1109	339.8	3.8	7.2	KP
1647010	145 Harmon Cir.	1117	224.3	2.5	8.8	KP
1645091	146 Harmon Cir.	1129	325.7	3.6	7.2	KP
1646984	086 N. Andrews Dr.	1110	139.9	1.6	10.6	KR
1643117	087 N. Andrews Dr.	1102	534.2	6.0	5.6	KR
1646993	087 N. Andrews Dr.	1106	1101.9	12.4	4.1	KR
1647581	088 N. Andrews Dr.	1010				KR [NR]
1646980	088 N. Andrews Dr.	1014	472.1	5.2	6.2	KR
1643116	089 N. Andrews Dr.	1002	351.0	3.9	7.1	KR
1643124	089 N. Andrews Dr.	1006	172.1	1.9	10.0	KR
1643989	120 Schumann	1026	326.8	3.6	7.4	KP
1644026	121 Schumann	1018	388.3	4.3	6.9	KP
1646990	122 Schumann	1010	308.1	3.4	7.4	KP
1643998	123 Schumann	1002	183.3	4.0	9.7	KP
1647020	124 Schumann	0926	241.5	2.6	8.2	DJKP
1641501	125 Schumann	0918	311.6	3.5	7.3	KP
1647017	126 Schumann	0910	421.8	4.7	6.5	KP
1646986	127 Schumann	0902	431.1	4.8	6.5	AKP
1647016	127 Schumann	0902	387.0	4.3	6.6	AKP
1647018	128 Schumann	0830	197.7	2.2	9.1	KP
1643131	129 Schumann	0822	269.6	3.0	7.8	GKP
1647024	130 Schumann	0814	324.9	3.6	7.4	KP
1647005	131 Schumann	0806	257.3	2.9	8.0	KP
1647029	152 Stull	1110	216.8	2.4	8.9	KP
1647014	153 Stull	1102	192.5	2.1	9.2	KP
1647013	154 Stull	1018	390.1	4.3	6.8	KP
1647560	155 Stull	1010	317.5	3.5	7.5	KP
1647003	156 Stull	1002	309.9	3.4	7.3	NR
1647002	157 Stull	1002	157.4	1.7	10.1	KP
1647026	158 Stull	1101				KP [NR]
1647001	159 Stull	1017	1655.8	17.4	3.2	GKR
1647025	160 Stull	1009	301.1	3.3	7.4	DJKP
1647012	161 Stull	1001	437.8	4.9	6.2	KP

<sup>a</sup>Key to Remarks:

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P Capehart home  
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S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

Sun Prairie Army Housing Area (Cont'd)  
Sun Prairie, Wisconsin 53590  
Indoor Radon Concentrations

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1646977	090 Vandenburg	1220	311.9	3.4	7.5	DJKR
1643132	090 Vandenburg	1224	106.9	1.2	12.3	KR
1647008	091 Vandenburg	1210	238.0	2.7	8.3	KR
1647035	091 Vandenburg	1216	218.7	2.4	8.9	KR
1641503	092 Vandenburg	1202	280.2	3.1	7.9	KR
1646998	092 Vandenburg	1206	106.9	1.2	12.3	AKR
1646995	092 Vandenburg	1206	104.8	1.2	12.0	AKR
1643127	093 Vandenburg	1110	166.2	1.9	9.8	KR
1643125	093 Vandenburg	1114	92.6	1.0	12.7	CKR
1647582	094 Vandenburg	1102	352.9	4.0	7.1	KR
1643118	094 Vandenburg	1106	373.4	4.2	6.9	KR
1643108	106 W. Andrews Dr.	1001	375.2	4.2	6.9	PR
1643107	106 W. Andrews Dr.	1009	488.9	5.4	6.1	KR
1646989	107 W. Andrews Dr.	1017	263.4	2.9	8.2	KR
1647028	107 W. Andrews Dr.	1025	401.0	4.4	6.5	KR
1647548	108 W. Andrews Dr.	1033	155.3	1.7	10.4	KR
1643104	108 W. Andrews Dr.	1041	285.3	3.2	7.6	KR
1643103	109 W. Andrews Dr.	1049	131.1	1.5	11.3	KR
1643135	109 W. Andrews Dr.	1057	451.6	5.0	6.3	KR
1647000	110 W. Andrews Dr.	1105	138.6	1.5	11.0	KR
1646987	110 W. Andrews Dr.	1109	267.1	2.9	8.1	AKR
1643128	110 W. Andrews Dr.	1109	236.3	2.6	8.3	AKR
1644001	111 W. Andrews Dr.	1113	172.1	1.9	10.0	KR
1643129	111 W. Andrews Dr.	1117	301.1	3.3	7.4	KR
1643113	112 W. Andrews Dr.	1121	248.5	2.8	8.4	GLR
1646985	112 W. Andrews Dr.	1125	271.3	3.0	7.8	KR
1643115	113 W. Andrews Dr.	1201	854.1	9.5	4.6	KR
1643995	113 W. Andrews Dr.	1205	598.8	6.6	5.5	AKR
1644025	113 W. Andrews Dr.	1205	530.7	5.8	5.7	AKR
1643120	114 W. Andrews Dr.	1209	157.2	1.7	10.4	KR
1646983	114 W. Andrews Dr.	1213	294.1	3.3	7.5	KR
1643114	115 W. Andrews Dr.	1210	215.0	2.8	9.0	DHJKR
1644029	115 W. Andrews Dr.	1214	833.6	9.2	4.7	KR
1643111	116 W. Andrews Dr.	1202	306.4	3.4	7.4	AKR
1643110	116 W. Andrews Dr.	1202	311.6	3.5	7.3	AKR
1646978	116 W. Andrews Dr.	1206	325.7	3.8	7.2	KR
1643102	117 W. Andrews Dr.	1126	300.7	3.4	7.7	KR
1646991	118 W. Andrews Dr.	1114	241.1	2.7	8.5	KR
1643112	118 W. Andrews Dr.	1118	352.9	4.0	7.1	GKR
1643105	119 W. Andrews Dr.	1110	373.4	4.1	6.9	KR

<sup>a</sup>Key to Remarks:

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M Detector in kitchen  
N Detector location unknown  
P Capehart home  
Q MCA home  
R Duplex (one-story) home  
S Duplex (multistory) home  
T Apartment building  
U Below detection limit  
[ND] No data  
[NR] Not returned

**Sun Prairie Army Housing Area (Cont'd)**  
**Sun Prairie, Wisconsin 53590**  
**Indoor Radon Concentrations**

Detector No.	Address	Unit No.	Exposure [(pCi/L) days]	Conc. (pCi/L)	Standard Deviation (%)	Remarks <sup>a</sup>
1643106	132 W. Andrews Dr.	1042	190.7	2.1	9.5	KP
1647034	133 W. Andrews Dr.	1034	162.7	1.8	9.9	NP
1643126	134 W. Andrews Dr.	1026	185.2	2.0	9.6	DJKP
1647565	135 W. Andrews Dr.	1018	180.2	2.0	9.4	NP
1643133	136 W. Andrews Dr.	1010	194.5	2.2	9.4	KP
1644006	137 W. Andrews Dr.	1002	313.7	3.5	7.5	KP

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 R Duplex (one-story) home  
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 [ND] No data  
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**Appendix G**

**Patrick Henry Army Housing Results  
Submitted by Fort Eustis**





DEPARTMENT OF THE ARMY

U.S. ARMY TRANSPORTATION CENTER  
FORT EUSTIS, VIRGINIA 2204-6000

REPLY TO  
ATTENTION OF:

March 12, 1990

Directorate of Engineering  
and Housing

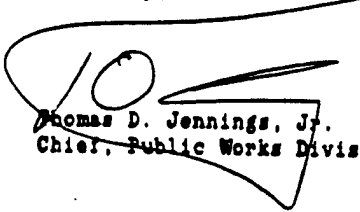
Mr. Ron Kolpa  
Argonne National Laboratories  
9700 S. Cass Avenue  
Mail Code: ER/203, B149  
Argonne, Illinois 60439-4815

Dear Mr. Kolpa:

Enclosed please find the requested copies of radon detector results (Encl 1) for Fort Eustis and Patrick Henry Village, Newport News, Virginia. Also, please find the original data sheets (Encl 2) used by our personnel when collecting the detectors at Patrick Henry Housing area, Newport News, Virginia.

Any questions should be directed to Mr. William J. Barnes, Jr. at (804) 878-4123.

Sincerely,

  
Thomas D. Jennings, Jr.  
Chief, Public Works Division

Enclosures



## **Appendix H**

**Analytical Results as Submitted to  
Argonne by Tech/Ops Landauer**



## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

**Tech Ops**  
**Landauer**

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1436013	DRNA	13-SEP-89	13-DEC-89		303.4	3.3	7.4	91
1436018	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	126.3		10.8	
1436019	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	161.7		9.8	
1436029	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	124.5		10.8	
1436033	DRNA	13-SEP-89	18-DEC-89		83.5	0.9	12.6	96
1436037	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	120.8		11.0	
1436041	DRNA	13-SEP-89	14-DEC-89		120.8	1.3	11.0	92
1436046	DRNA	13-SEP-89	13-DEC-89		195.3	2.1	9.0	91
1436066	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	137.5		10.4	
1436069	DRNA	NOT GIVEN	13-DEC-89	NO START DATE PROVIDED	154.3		10.0	
1436071	DRNA	13-SEP-89	13-DEC-89		143.1	1.6	10.3	91
1436092	DRNA	13-SEP-89	15-DEC-89		152.4	1.6	10.0	93
1641172	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	205.7		9.2	
1641196	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	129.3		11.3	
1641199	DRN	11-SEP-89	31-DEC-89		67.8	0.6	14.9	111

O.C. Release  
DLH

Process No.  
A06675

Report Date  
02-FEB-90

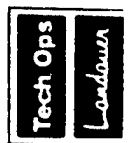
Date Received  
26-JAN-90

PAGE 1 OF 15

# Radon Monitoring Report

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ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data - Comments	Exposure pCi/rays	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1641503	DRN	13-SEP-89	13-DEC-89		280.2	3.1	7.9	91
1641504	DRN	13-SEP-89	13-DEC-89		298.8	3.3	7.7	91
1641505	DRN	13-SEP-89	13-DEC-89		162.8	1.8	10.2	91
1641506	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	170.2		10.0	
1641511	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	47.3		17.1	
1641512	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	80.8		13.9	
1641517	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	86.4		13.5	
1641519	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	43.5		17.7	
1641527	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	315.6		7.5	
1641537	DRN	16-SEP-89	11-DEC-89	NO START DATE PROVIDED	54.7	0.6	16.2	86
1641538	DRN	NOT GIVEN	12-SEP-89		64.0		15.2	
1641543	DRN	11-SEP-89	16-DEC-89		103.2	1.1	12.5	96
1641544	DRN	12-SEP-89	15-DEC-89	NO END DATE PROVIDED	119.9	1.3	11.7	94
1641545	DRN	12-SEP-89	NOT GIVEN		127.4		11.4	
1641550	DRN	12-SEP-89	NOT GIVEN		82.7		13.7	

## Radon Monitoring Report

ARGONNIE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG. ER-203  
9700 SOUTH CASS AVENUE  
ARGONNIE, IL 60439

**Tech Ops**  
**Landauer**  
Tech/Ops Landauer, Inc.  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1641334	ERN	14-SEP-89	NOT GIVEN	NO END DATE PROVIDED	37.9		18.6	
1641336	DRN	12-SEP-89	14-DEC-89		151.6	1.6	10.9	93
1641338	DRN	12-SEP-89	12-DEC-89		90.1	1.0	13.2	91
1641339	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	127.4		11.4	
1641342	DRN	14-SEP-89	14-DEC-89		190.7	2.1	9.5	91
1642319	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	88.3		13.4	
1642323	DRN	09-SEP-89	08-DEC-89		106.9	1.2	12.3	90
1642327	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	73.4		14.4	
1642329	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	82.7		13.7	
1642332	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	140.4		10.9	
1642335	DRN	09-SEP-89	21-NOV-89		51.0	0.7	16.7	73
1642338	DRN	09-SEP-89	28-DEC-89		58.4	0.5	15.8	110
1642340	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	99.4		12.7	
1643069	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	97.6		12.8	
1643073	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	78.9		14.0	

O.C. Release  
DLH

Process No.  
A06675

Report Date  
02-FEB-90

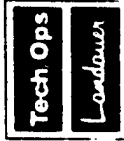
Date Received  
26-JAN-90

PAGE 3 OF 15

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Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO OF DAYS
1643076	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	118.1		11.8	
1643079	DRN	10-SEP-89	17-DEC-89		67.8	0.7	14.9	98
1643088	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	82.7		13.7	
1643098	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	259.7		8.2	
1643102	DRN	15-SEP-89	13-DEC-89		300.7	3.4	7.7	89
1643103	DRN	14-SEP-89	13-DEC-89		131.1	1.5	11.3	90
1643105	DRN	14-SEP-89	13-DEC-89		373.4	4.1	6.9	90
1643106	DRN	14-SEP-89	14-DEC-89		190.7	2.1	9.5	91
1643107	DRN	14-SEP-89	13-DEC-89		488.9	5.4	6.1	90
1643108	DRN	14-SEP-89	13-DEC-89		375.2	4.2	6.9	90
1643109	DRN	14-SEP-89	NOT GIVEN	NO END DATE PROVIDED	442.3		6.4	
1643112	DRN	15-SEP-89	13-DEC-89		352.9	4.0	7.1	89
1643113	DRN	14-SEP-89	13-DEC-89		248.5	2.8	8.4	90
1643114	DRN	14-SEP-89	NOT GIVEN	NO END DATE PROVIDED	215.0		9.0	
1643115	DRN	14-SEP-89	13-DEC-89		854.1	9.5	4.6	90

Q.C. Release DLH	Process No A06675	Report Date 02-FEB-90	Date Received 26-JAN-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

**Tech Ops**  
**Landauer**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1643116	DRN	13-SEP-89	13-DEC-89	NO END DATE PROVIDED	351.0	3.9	7.1	89
1643118	DRN	15-SEP-89	13-DEC-89		373.4	4.2	6.9	89
1643120	DRN	14-SEP-89	15-DEC-89		157.2	1.7	10.4	92
1643121	DRN	15-SEP-89	13-DEC-89		265.3	3.0	8.1	89
1643123	DRN	15-SEP-89	13-DEC-89		364.0	4.1	7.0	89
1643124	DRN	15-SEP-89	13-DEC-89		172.1	1.9	10.0	89
1643126	DRN	14-SEP-89	NOT GIVEN		185.2		9.6	
1643132	DRN	15-SEP-89	13-DEC-89		106.9	1.2	12.3	89
1643133	DRN	14-SEP-89	13-DEC-89		194.5	2.2	9.4	90
1643134	DRN	15-SEP-89	13-DEC-89		520.6	5.8	5.9	89
1643135	DRN	14-SEP-89	13-DEC-89		451.6	5.0	6.3	90
1643188	DRN	13-SEP-89	13-DEC-89		323.0	3.5	7.4	91
1643196	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	1128.0		4.0	
1643208	DRN	17-SEP-89	17-DEC-89		375.2	4.1	6.9	91
1643210	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	174.0		9.9	

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# Radon Monitoring Report

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**Tech Ops**  
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Telephone (708) 755 7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1643211	DRN	12-SEP-89	14-DEC-89	NO END DATE PROVIDED	282.0	3.0	7.9	93
1643213	DRN	12-SEP-89	10-DEC-89		382.7	4.3	6.8	89
1643240	DRN	11-SEP-89	19-DEC-89		75.2	0.8	14.3	99
1643241	DRN	11-SEP-89	11-DEC-89		175.8	1.9	9.9	91
1643413	DRN	14-SEP-89	NOT GIVEN		330.5		7.3	
1643416	DRN	11-OCT-89	15-DEC-89	* - LESS THAN INDICATED VALUE	1079.6	16.6	4.1	65
1643420	DRN	15-SEP-89	15-DEC-89		80.8	0.9	13.9	91
1643422	DRN	14-SEP-89	12-DEC-89		* 30.0	*	0.3	89
1643439	DRN	14-SEP-89	14-DEC-89		384.5	4.2	6.8	91
1643444	DRN	20-OCT-89	21-DEC-89		90.1	1.5	13.2	62
1643445	DRN	14-SEP-89	14-DEC-89	NO END DATE PROVIDED	269.0	3.0	8.1	91
1643450	DRN	14-SEP-89	24-DEC-89		95.7	0.9	12.9	101
1643452	DRN	14-SEP-89	NOT GIVEN		151.6		10.5	
1643640	DRN	11-SEP-89	01-DEC-89		43.5	0.5	17.7	81
1643644	DRN	09-SEP-89	NOT GIVEN		140.4		10.9	

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O.C. Release DLH	Process No. A06675	Report Date 02-FEB-90	Date Received 26-JAN-90
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# Radon Monitoring Report

ARGONNIE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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Acct. No. 0400063

**Tech/Ops**  
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Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/d days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1643650	DRN	16-SEP-89	22-DEC-89	NO END DATE PROVIDED	52.9	0.5	16.4	97
1643681	DRN	12-SEP-89	NOT GIVEN		108.8		12.2	
1643988	DRN	12-SEP-89	13-DEC-89		321.2	3.5	7.4	92
1643989	DRN	13-SEP-89	13-DEC-89		326.8	3.6	7.4	91
1643990	DRN	14-SEP-89	13-DEC-89		211.2	2.3	9.1	90
1643995	DRN	13-SEP-89	13-DEC-89		598.8	6.6	5.5	91
1643996	DRN	13-SEP-89	15-DEC-89		220.6	2.4	8.9	93
1643998	DRN	13-SEP-88	13-DEC-89		183.3	0.4	9.7	456
1644001	DRN	13-SEP-89	13-DEC-89		172.1	1.9	10.0	91
1644004	DRN	08-SEP-89	13-DEC-89		341.7	3.6	7.2	96
1644006	DRN	13-SEP-89	12-DEC-89		313.7	3.5	7.5	90
1644022	DRN	13-SEP-89	13-DEC-89		298.8	3.3	7.7	91
1644023	DRN	13-SEP-89	13-DEC-89		216.8	2.4	8.9	91
1644026	DRN	13-SEP-89	13-DEC-89		388.3	4.3	6.8	91
1644029	DRN	13-SEP-89	13-DEC-89		833.6	9.2	4.7	91

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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**Tech/Ops Landauer, Inc.**  
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Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1644110	DRN	07-OCT-89	02-JAN-90	NO END DATE PROVIDED	78.9	0.9	14.0	87
1644113	DRN	15-SEP-89	13-DEC-89		311.9	3.5	7.5	89
1644211	DRN	06-SEP-89	NOT GIVEN		93.9		13.0	
1644216	DRN	06-SEP-89	07-DEC-89		159.1	1.7	10.3	92
1644218	DRN	11-SEP-89	11-DEC-89	NO DATES PROVIDED	92.0	1.0	13.1	91
1644220	DRN	NOT GIVEN	NOT GIVEN		54.7		16.2	
1644223	DRN	11-SEP-89	12-DEC-89		134.8	1.5	11.1	92
1644226	DRN	11-SEP-89	11-DEC-89		30.5	0.3	20.0	91
1644230	DRN	11-SEP-89	11-DEC-89	NO START DATE PROVIDED	56.6	0.6	16.0	91
1644243	DRN	NOT GIVEN	15-DEC-89		49.1		16.9	
1644250	DRN	11-SEP-89	12-DEC-89		80.8	0.9	13.9	92
1644255	DRN	11-SEP-89	11-DEC-89		32.4	0.4	19.6	91
1644339	DRN	12-SEP-89	12-DEC-89		324.9	3.6	7.4	91
1645086	DRN	07-SEP-89	07-DEC-89		78.9	0.9	14.0	91
1645095	DRN	05-SEP-89	02-JAN-90		30.5	0.3	20.0	119

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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Acct. No. 0400063

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**Landauer**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
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Glenwood, Illinois 60425-1586  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1645107	DRN	05-SEP-89	NOT GIVEN	NO END DATE PROVIDED	97.6		12.8	
1645128	DRN	NOT GIVEN	05-DEC-89	* - LESS THAN INDICATED VALUE NO START DATE PROVIDED	* 30.0			
1645130	DRN	05-SEP-89	05-DEC-89		60.3	0.7	15.6	91
1645131	DRN	05-SEP-89	05-DEC-89		37.9	0.4	18.6	91
1645132	DRN	05-SEP-89	05-DEC-89		49.1	0.5	16.9	91
1645135	DRN	05-SEP-89	05-DEC-89		62.2	0.7	15.4	91
1645138	DRN	01-SEP-89	NOT GIVEN	NO END DATE PROVIDED	41.7		18.0	
1645140	DRN	05-SEP-89	NOT GIVEN	NO END DATE PROVIDED	77.1		14.1	
1645142	DRN	05-SEP-89	05-DEC-89		84.5	0.9	13.6	91
1645143	DRN	05-SEP-89	06-DEC-89		92.9	0.6	16.4	92
1645423	DRN	12-SEP-89	12-DEC-89		121.8	1.3	11.6	91
1645430	DRN	12-SEP-89	22-DEC-89		144.2	1.4	10.8	101
1645443	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645447	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	32.4		19.6	

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26-JAN-90

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ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
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Acct. No. 0400063

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**Landauer**

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Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645458	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	75.2		14.3	
1645459	DRN	06-SEP-89	NOT GIVEN	* - LESS THAN INDICATED VALUE NO END DATE PROVIDED	* 30.0			
1645466	DRN	07-SEP-89	08-DEC-89		190.7	2.1	9.5	92
1645469	DRN	07-SEP-89	12-DEC-89		125.9	1.3	11.1	96
1645471	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	34.2		19.2	
1645474	DRN	07-SEP-89	06-DEC-89		118.1	1.3	11.8	90
1645481	DRN	04-SEP-89	NOT GIVEN	NO END DATE PROVIDED	108.8		12.2	
1645583	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645584	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	30.5		20.0	
1645597	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645639	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645757	DRN	11-SEP-89	14-DEC-89		105.0	1.1	12.4	94
1645765	DRN	10-SEP-89	10-DEC-89		43.5	0.5	17.7	91
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O.C. Release DLH	Process No. A06675	Report Date 02-FEB-90	Date Received 26-JAN-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

0400063

Acct. No.

**Tech Ops**  
**Landauer**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data - Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645770	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	259.7		8.2	
1645778	DRH	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	215.0		9.0	
1645785	DRH	07-SEP-89	11-DEC-89		170.2	1.8	10.0	93
1645857	DRN	08-SEP-89	10-DEC-89		37.9	0.4	18.6	93
1645865	DRN	08-SEP-89	08-DEC-89		30.5	0.3	20.0	91
1645867	DRN	08-SEP-89	16-DEC-89		97.6	1.0	12.8	99
1645882	DRN	08-SEP-89	12-DEC-89		110.6	1.2	12.1	93
1645893	DRN	08-SEP-89	08-DEC-89		86.4	0.9	13.5	91
1645904	DRN	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	95.7		12.9	
1646027	DRN	11-OCT-89	15-DEC-89		1090.7	16.8	4.1	65
1646039	DRN	11-OCT-89	15-DEC-89		1051.6	16.2	4.2	65
1646428	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	65.9		15.1	
1646431	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	75.2		14.3	
1646434	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	43.5		17.7	
1646443	DRH	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	45.4		17.4	

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Q.C. Release DLH	Process No. A06675	Report Date 02-FEB-90	Date Received 26-JAN-90
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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG EP-203  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1646444	DRN	10-SEP-89	10-DEC-89	NO END DATE PROVIDED	43.5	0.5	17.7	91
1646449	DRN	10-SEP-89	NOT GIVEN		80.8		13.9	
1646454	DRN	NOT GIVEN	NOT GIVEN		64.0		15.2	
1646478	DRN	06-SEP-89	07-JAN-90	NO END DATE PROVIDED	246.6	2.0	8.4	123
1646485	DRN	06-SEP-89	NOT GIVEN		92.0		13.1	
1646977	DRN	15-SEP-89	NOT GIVEN		311.9		7.5	
1646979	DRN	15-SEP-89	13-DEC-89	NO END DATE PROVIDED	231.7	2.6	8.7	89
1646980	DRN	15-SEP-89	15-DEC-89		472.1	5.2	6.2	91
1646986	DRN	14-SEP-89	13-DEC-89		431.1	4.8	6.5	90
1646987	DRN	14-SEP-89	15-DEC-89		267.1	2.9	8.1	92
1646989	DRN	14-SEP-89	14-DEC-89		263.4	2.9	8.2	91
1646991	DRN	15-SEP-89	13-DEC-89		241.1	2.7	8.5	89
1646993	DRN	15-SEP-89	13-DEC-89		1101.9	12.4	4.1	89
1646994	DRN	14-SEP-89	13-DEC-89		308.1	3.4	7.6	90
1646996	DRN	13-SEP-89	13-DEC-89		216.8	2.4	8.9	91

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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**Tech/Ops Landauer, Inc.**  
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**Tech Ops**

**Landauer**

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1646998	DRN	13-SEP-89	13-DEC-89	NO END DATE PROVIDED	106.9	1.2	12.3	91
1647000	DRN	14-SEP-89	15-DEC-89		138.6	1.5	11.0	92
1647004	DRN	13-SEP-89	13-DEC-89		278.3	3.1	8.0	91
1647007	DRN	14-SEP-89	*NOT GIVEN		151.6		10.5	
1647010	DRN	14-SEP-88	13-DEC-89		224.3	0.5	8.8	455
1647013	DRN	14-SEP-89	13-DEC-89	NO END DATE PROVIDED	390.1	4.3	6.8	90
1647015	DRN	13-DEC-89	13-DEC-89		339.8		7.2	
1647017	DRN	14-SEP-89	13-DEC-89		421.8	4.7	6.5	90
1647021	DRN	14-SEP-89	NOT GIVEN		198.2		9.3	
1647023	DRN	14-SEP-89	13-DEC-89		326.8	3.6	7.4	90
1647024	DRN	14-SEP-89	13-DEC-89	NO END DATE PROVIDED	324.9	3.6	7.4	90
1647027	DRN	08-SEP-89	14-DEC-89		194.5	2.0	9.4	97
1647029	DRN	14-SEP-89	13-DEC-89		216.8	2.4	8.9	90
1647035	DRN	13-SEP-89	13-DEC-89		218.7	2.4	8.9	91

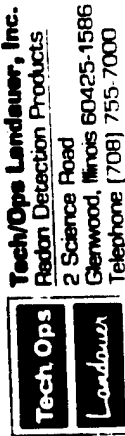
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
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Acct. No. 0400063



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Detector Number	Detector Type	Starting Date	Ending Date	Field Data : Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1647432	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0		20.0	
1647433	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	30.5		10.5	
1647473	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	151.6			
1647474	DRN	08-SEP-89	17-OCT-89		56.6	1.5	16.0	39
1647476	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	121.8		11.6	
1647479	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	65.9		15.1	
1647482	DRN	NOT GIVEN	09-DEC-89	NO START DATE PROVIDED	99.4		12.7	
1647483	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	51.0		16.7	
1647484	DRN	10-SEP-89	10-DEC-89		51.0	0.6	16.7	91
1647548	DRN	13-SEP-89	13-DEC-89		155.3	1.7	10.4	91
1647560	DRN	14-SEP-89	13-DEC-89		317.5	3.5	7.5	90
1647582	DRN	15-SEP-89	13-DEC-89		352.9	4.0	7.1	89
1647584	DRN	15-SEP-89	13-DEC-89		287.6	3.2	7.8	89
1647586	DRN	15-SEP-89	13-DEC-89		572.7	6.4	5.6	89

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data Comments	Exposure pCi/d-days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1643189	DRN	12-SEP-89	12-DEC-89		106.6	1.2	12.0	91
1643191	DRN	12-SEP-89	16-DEC-89		125.9	1.3	11.1	95
1643199	DRN	12-SEP-89	12-DEC-89		181.9	2.0	9.4	91
1643224	DRN	12-SEP-89	12-DEC-89		1636.5	18.0	3.3	91
1643235	DRN	12-SEP-89	29-NOV-89		108.3	1.4	11.9	78
1643236	DRN	11-SEP-89	11-DEC-89		54.0	0.6	15.8	91
1643238	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	59.3		15.2	
1643242	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	127.6		11.0	
1643414	DRN	11-OCT-89	15-DEC-89		1119.5	17.2	3.9	65
1643419	DRN	14-SEP-89	20-DEC-89		162.7	1.7	9.9	97
1643421	DRN	14-SEP-89	15-DEC-89		68.0	0.7	14.4	92
1643430	DRN	11-OCT-89	15-DEC-89		1121.3	17.3	3.9	65
1643434	DRN	11-OCT-89	15-DEC-89		1100.3	16.9	4.0	65
1643442	DRN	11-OCT-89	15-DEC-89		1005.6	15.5	4.1	65
1643446	DRN	14-SEP-89	04-JAN-90		220.5	2.0	8.6	112

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1643451	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	234.5		8.4	
1643455	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	125.9		11.1	
1643642	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	64.5		14.7	
1643643	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	62.8		14.9	
1643646	DRN	09-SEP-89	09-DEC-89	NO END DATE PROVIDED	59.3	0.7	15.2	91
1643667	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	85.6		13.1	
1643675	DRN	12-SEP-89	13-DEC-89	NO END DATE PROVIDED	183.5	2.0	9.3	92
1644012	DRN	09-SEP-89	04-DEC-89		90.8	1.0	12.8	90
1644016	DRN	09-SEP-89	09-DEC-89		66.3	0.7	14.6	95
1644020	DRN	08-SEP-89	08-DEC-89		208.2	2.3	8.8	91
1644210	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	96.1		12.5	
1644212	DRN	NOT GIVEN	07-DEC-89	NO START DATE PROVIDED	180.2		9.4	
1644214	DRN	06-SEP-89	11-DEC-89		208.2	2.2	8.8	96
1644217	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	260.8		8.0	
1644219	DRN	11-SEP-89	14-DEC-89		69.8	0.7	14.3	94

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1644221	DRN	11-SEP-89	11-DEC-89	NO END DATE PROVIDED	69.8	0.8	14.3	91
1644222	DRN	11-SEP-89	11-DEC-89		73.3	0.8	14.0	91
1644229	DRN	11-SEP-89	NOT GIVEN		45.3		16.9	
1644231	DRN	11-SEP-89	10-DEC-89		66.3	0.7	14.6	90
1644237	DRN	10-SEP-89	31-DEC-89	NO END DATE PROVIDED	69.8	0.6	14.3	112
1644241	DRN	11-SEP-89	11-DEC-89		80.3	0.9	13.5	91
1644244	DRN	12-SEP-89	12-DEC-89		71.5	0.8	14.1	91
1644245	DRN	10-SEP-89	13-DEC-89		45.3	0.5	16.9	94
1644249	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	43.5		17.1	
1644322	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	183.7		9.4	
1644327	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	62.8		14.9	
1645068	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	329.2		7.1	
1645091	DRN	13-SEP-89	13-DEC-89	NO END DATE PROVIDED	325.7	3.6	7.2	91
1645096	DRN	05-SEP-89	10-DEC-89		48.9	0.5	16.7	96
1645097	DRN	05-SEP-89	NOT GIVEN		57.5		15.4	

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/ft days	Avg Radon Conc pCi/ft	PCT STD DEV	NO. OF DAYS
1645098	DRN	03-SEP-89	06-DEC-89	* - LESS THAN INDICATED VALUE	41.7	0.5	17.4	92
1645105	DRN	03-SEP-89	09-DEC-89		* 30.0	* 0.3		95
1645113	DRN	03-SEP-89	06-DEC-89		87.3	0.9	13.0	92
1645115	DRN	03-SEP-89	07-DEC-89		82.1	0.9	13.4	93
1645116	DRN	03-SEP-89	03-DEC-89		69.8	0.8	14.3	91
1645120	DRN	03-SEP-89	NOT GIVEN	NO END DATE PROVIDED	40.0		17.7	
1645121	DRN	03-SEP-89	06-JAN-90		59.3	0.5	19.2	123
1645124	DRN	03-SEP-89	NOT GIVEN		69.8		14.3	
1645126	DRN	03-SEP-89	NOT GIVEN	NO END DATE PROVIDED	78.5		13.6	
1645134	DRN	03-SEP-89	03-DEC-89		71.5	0.8	14.1	91
1645426	DRN	12-SEP-89	12-DEC-89		196.0	2.2	9.1	91
1645436	DRN	11-OCT-89	15-DEC-89		1095.0	16.8	4.0	65
1645437	DRN	11-OCT-89	15-DEC-89		1024.9	15.8	4.1	65
1645445	DRN	06-SEP-89	16-DEC-89		48.8	0.5	16.4	101
1645461	DRN	06-SEP-89	06-DEC-89		43.5	0.5	17.1	91

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1645468	DRN	07-SEP-89	07-DEC-89	NO END DATE PROVIDED	152.2	1.7	10.2	91
1645473	DRN	06-SEP-89	NOT GIVEN		41.7		17.4	
1645483	DRN	18-OCT-89	18-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.5		61
1645581	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645582	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645592	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645593	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645638	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645641	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645758	DRN	11-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1645759	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645761	DRN	11-SEP-89	11-DEC-89		53.8	0.6	13.6	91
1645768	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	64.5		14.7	
1645777	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	103.1		12.1	
1645784	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	311.6		7.3	
1645788	DRN	09-SEP-89	09-DEC-89		285.3	3.1	7.6	91
1645794	DRN	02-SEP-89	NOT GIVEN	NO END DATE PROVIDED	234.5		8.4	
1645807	DRN	06-SEP-89	21-DEC-89		166.2	1.6	9.8	106
1645808	DRN	06-SEP-89	04-OCT-89		80.3	2.9	13.5	28
1645815	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	178.4		9.5	
1645861	DRN	08-SEP-89	08-DEC-89		80.3	0.9	13.5	91
1645866	DRN	08-SEP-89	11-DEC-89		75.0	0.8	13.9	94
1645875	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	55.8		15.6	
1645879	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	56.2		15.8	
1645885	DRN	11-MAR-89	12-DEC-89		162.7	0.6	9.9	276
1645906	DRN	13-SEP-89	17-DEC-89		111.8	1.2	11.7	95

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645916	DRN	11-OCT-89	15-DEC-89		1079.2	16.6	4.0	65
1645918	DRN	12-SEP-89	13-DEC-89		92.6	1.0	12.7	92
1645921	DRN	11-OCT-89	15-DEC-89		1058.2	16.3	4.0	65
1645923	DRN	12-SEP-89	19-DEC-89		111.8	1.1	11.7	98
1645928	DRN	12-SEP-89	12-DEC-89		117.1	1.3	11.3	91
1646028	DRN	11-OCT-89	15-DEC-89		1038.9	16.0	4.1	65
1646040	DRN	11-OCT-89	15-DEC-89		1070.5	16.5	4.0	65
1646426	DRN	10-SEP-89	09-DEC-89		55.8	0.6	15.6	90
1646433	DRN	10-SEP-89	10-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1646438	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	78.5		13.6	
1646445	DRN	NOT GIVEN	14-DEC-89	NO START DATE PROVIDED	108.3		11.9	
1646450	DRN	10-SEP-89	16-DEC-89		48.8	0.5	16.4	97
1646453	DRN	NOT GIVEN	22-DEC-89	NO START DATE PROVIDED	64.5		14.7	
1646456	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	89.1		12.9	
1646458	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	55.8		15.6	

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## Radon Monitoring Report

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1646469	DRN	08-SEP-89	08-DEC-89		80.3	0.9	13.5	91
1646475	DRN	06-SEP-89	14-DEC-89		152.2	1.5	10.2	99
1646481	DRN	05-SEP-89	17-DEC-89		576.3	5.6	5.4	103
1646488	DRN	06-SEP-89	06-DEC-89		94.3	1.0	12.6	91
1646978	DRN	19-SEP-89	13-DEC-89		325.7	3.8	7.2	85
1646983	DRN	14-SEP-89	13-DEC-89		294.1	3.3	7.5	90
1646984	DRN	15-SEP-89	12-DEC-89		139.9	1.6	10.6	88
1646985	DRN	15-SEP-89	13-DEC-89		271.3	3.0	7.8	89
1646988	DRN	14-SEP-89	13-DEC-89		206.5	2.3	8.9	90
1646990	DRN	14-SEP-89	13-DEC-89		308.1	3.4	7.4	90
1646992	DRN	15-SEP-89	13-DEC-89		148.6	1.7	10.3	89
1646997	DRN	13-SEP-89	13-DEC-89		227.5	2.5	8.5	91
1646999	DRN	13-SEP-89	13-DEC-89		125.9	1.4	11.1	91
1647001	DRN	14-SEP-89	18-DEC-89		1655.8	17.4	3.2	95
1647002	DRN	14-SEP-89	13-DEC-89		157.4	1.7	10.1	90

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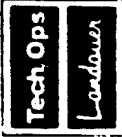
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1647005	DRN	14-SEP-89	13-DEC-89		257.3	2.9	8.0	90
1647006	DRN	14-SEP-89	17-SEP-89		194.2	64.7	9.1	3
1647008	DRN	15-SEP-89	13-DEC-89		238.0	2.7	8.3	89
1647009	DRN	13-SEP-89	13-DEC-89		224.0	2.5	8.5	91
1647011	DRN	14-SEP-89	13-DEC-89		434.3	4.8	6.2	90
1647012	DRN	14-SEP-89	13-DEC-89		437.8	4.9	6.2	90
1647014	DRN	14-SEP-89	13-DEC-89		192.5	2.1	9.2	90
1647018	DRN	14-SEP-89	13-DEC-89		197.7	2.2	9.1	90
1647434	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED LOOSE CHIP IN CUP	* 30.0			
1647454	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1647455	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1647466	DRN	09-SEP-89	10-DEC-89		71.5	0.8	14.1	92
1647585	DRN	15-SEP-89	13-DEC-89		222.3	2.5	8.6	89

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCiH-days	Avg Radon Conc pCi/l	PCT STD DEV	NO OF DAYS
1647587	DRN	15-SEP-89	14-DEC-89		351.9	3.9	6.9	90
1648140	DRN	06-SEP-89	14-DEC-89		34.7	0.4	18.6	99
1648153	DRN	06-SEP-89	06-DEC-89		41.7	0.5	17.4	91
1648165	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	31.2		19.2	
1648169	DRN	08-SEP-89	12-DEC-89		62.8	0.7	14.9	93
1648228	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	54.0		15.8	
1648229	DRN	06-SEP-89	06-DEC-89		103.1	1.1	12.1	91
1648233	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	99.6		12.3	
1648239	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	243.3		8.2	
1648242	DRN	12-SEP-89	09-DEC-89		949.6	10.8	4.3	88
1648250	DRN	06-SEP-89	07-DEC-89		57.5	0.6	15.4	92
1648267	DRN	08-SEP-89	08-DEC-89		246.8	2.7	8.2	91
1648270	DRN	07-SEP-89	07-DEC-89		189.0	2.1	9.2	91
1648272	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	390.5		6.6	
1648274	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	96.1		12.5	

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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**Tech Ops**  
**Landauer**

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data - Comments	Exposure pCi/l days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1648287	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	85.6		13.1	

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O.C. Release  
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A06685

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02-FEB-90

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26-JAN-90

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

**Tech Ops**  
**Landauer**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1641159	DRN	03-SEP-89	10-DEC-89		38.2	0.4	18.0	93
1641162	DRN	07-SEP-89	23-JAN-90		313.4	2.3	7.3	138
1641163	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	174.9		9.6	
1641167	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	264.3		7.9	
1641168	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	418.5		6.4	
1641169	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	87.3		13.0	
1641170	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	116.2		11.9	
1641171	DRN	07-SEP-89	07-DEC-89		134.6	1.5	10.8	91
1641173	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	111.8		11.7	
1641175	DRN	07-SEP-89	07-DEC-89		167.9	1.8	9.8	91
1641176	DRN	NOT GIVEN	07-DEC-89	NO START DATE PROVIDED	199.5		9.0	
1641179	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	376.5		6.7	
1641186	DRN	07-SEP-89	03-OCT-89	* - LESS THAN INDICATED VALUE	* 30.0	* 1.2		26
1641189	DRN	07-SEP-89	07-DEC-89		75.0	0.8	13.9	91
1641191	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	138.1		10.7	

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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**Tech Ops**  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1641192	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	108.3		11.9	
1641198	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	118.9		11.4	
1641202	DRN	05-SEP-89	18-DEC-89		66.3	0.6	14.6	104
1641501	DRN	14-SEP-89	13-DEC-89		311.6	3.5	7.3	90
1641508	DRN	08-SEP-89	08-DEC-89		120.6	1.3	11.3	91
1641565	DRN	14-SEP-89	NOT GIVEN	NO END DATE PROVIDED	278.3		7.7	
1641567	DRN	14-SEP-89	23-OCT-89		94.3	2.4	12.6	39
1642294	DRN	11-OCT-89	15-DEC-89		1102.0	17.0	4.0	65
1642297	DRN	11-OCT-89	15-DEC-89		1060.0	14.3	4.0	65
1642318	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	166.2		9.8	
1642324	DRN	NOT GIVEN	07-JAN-90	NO START DATE PROVIDED	211.7		8.8	
1642326	DRN	09-SEP-89	16-DEC-89		111.8	1.1	11.7	98
1642328	DRN	09-SEP-89	19-JAN-90		122.4	0.9	11.3	132
1642333	DRN	09-SEP-89	09-DEC-89		69.8	0.8	14.3	91
1642334	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	101.3		12.2	

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# Radon Monitoring Report

ARGONNIE NATIONAL LABORATORY  
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Acct. No. 04000063

**Tech Ops**  
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Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/d-days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1642336	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	68.0		14.4	
1642351	DRN	09-SEP-89	07-JAN-90		113.6	0.9	11.6	120
1643071	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	157.4		10.1	
1643074	DRN	09-SEP-89	14-DEC-89		52.3	0.5	16.0	96
1643075	DRN	09-SEP-89	17-DEC-89		68.0	0.7	14.4	99
1643077	DRN	08-SEP-89	08-DEC-89		255.6	2.8	8.0	91
1643080	DRN	07-SEP-89	30-DEC-89		211.7	1.9	8.8	114
1643083	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	341.7		7.2	
1643085	DRN	01-SEP-89	10-DEC-89		68.0	0.7	14.4	100
1643086	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	1252.7		3.7	
1643087	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	139.9		10.6	
1643089	DRN	13-SEP-89	31-DEC-89		183.5	1.7	9.3	109
1643092	DRN	NOT GIVEN	10-DEC-89	NO END DATE PROVIDED	115.4		11.5	
1643097	DRN	NOT GIVEN	15-DEC-89	NO START DATE PROVIDED	187.2		9.3	
1643100	DRN	23-SEP-89	31-DEC-89		117.1	1.2	11.5	99

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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No.

0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1643104	DRN	15-SEP-89	13-DEC-89		285.3	3.2	7.6	89
1643110	DRN	15-SEP-89	13-DEC-89		311.6	3.5	7.3	89
1643111	DRN	15-SEP-89	13-DEC-89		306.4	3.4	7.4	89
1643117	DRN	15-SEP-89	13-DEC-89		534.2	6.0	5.6	89
1643122	DRN	15-SEP-89	13-DEC-89		201.2	2.3	9.0	89
1643125	DRN	15-SEP-89	13-DEC-89		92.6	1.0	12.7	89
1643127	DRN	15-SEP-89	13-DEC-89		166.2	1.9	9.8	89
1643128	DRN	14-SEP-89	14-DEC-89		236.3	2.6	8.3	91
1643129	DRN	14-SEP-89	13-DEC-89		301.1	3.3	7.4	90
1643130	DRN	14-SEP-89	13-DEC-89		323.9	3.6	7.2	90
1643131	DRN	14-SEP-89	13-DEC-89		269.6	3.0	7.8	90
1643184	DRN	07-SEP-89	10-DEC-89		108.3	1.2	11.9	94
1643185	DRN	12-SEP-89	12-DEC-89		127.6	1.4	11.0	91
1643187	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	234.5		8.4	
1643190	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	115.4		11.5	

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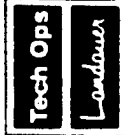
Q.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

ARGONNIE NATIONAL LABORATORY  
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Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data Comments	Exposure pCiHr days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1643192	DRN	12-SEP-89	27-DEC-89		104.8	1.0	12.0	106
1643193	DRN	13-SEP-89	13-DEC-89		178.4	2.0	9.5	91
1643194	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	76.8		13.7	
1643201	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	134.6		10.8	
1643202	DRN	12-SEP-89	13-DEC-89		69.8	0.8	14.3	92
1643204	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	185.5		9.3	
1643206	DRN	12-SEP-89	13-DEC-89		232.8	2.5	8.4	92
1643214	DRN	12-SEP-89	01-DEC-89		1612.0	20.2	3.3	80
1643215	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	157.4		10.1	
1643216	DRN	12-SEP-89	12-DEC-89		243.3	2.7	8.2	91
1643218	DRN	12-SEP-89	03-JAN-90		367.7	3.3	6.8	113
1643219	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	80.3		13.5	
1643220	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	164.4		9.9	
1643222	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	122.4		11.3	
1643225	DRN	NOT GIVEN	13-DEC-89	NO START DATE PROVIDED	164.4		9.9	

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O.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
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Acct. No.

0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1643227	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	167.9		9.8	
1643228	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	211.7		8.8	
1643230	DRN	12-SEP-89	12-DEC-89		281.8	3.1	7.7	91
1643231	DRN	12-SEP-89	18-DEC-89		288.9	3.0	7.6	97
1643239	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	66.3		14.6	
1643243	DRN	12-SEP-89	15-DEC-89		148.6	1.6	10.3	94
1643244	DRN	11-SEP-89	19-DEC-89		103.1	1.0	12.1	99
1643424	DRN	14-SEP-89	14-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1643425	DRN	11-OCT-89	16-DEC-89		984.6	14.9	4.2	66
1643639	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	73.3		14.0	
1643641	DRN	11-SEP-89	11-DEC-89		183.7	2.0	9.4	91
1643652	DRN	09-SEP-89	09-DEC-89		112.5	1.2	12.0	91
1643653	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	48.8		16.4	
1643655	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	54.0		15.8	
1643658	DRN	09-SEP-89	14-JAN-90		104.8	0.8	12.0	127

O.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
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Glenwood, Illinois 60425-1586  
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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1643664	DRH	09-SEP-89	14-DEC-89	NO END DATE PROVIDED	71.5	0.7	14.1	96
1643665	DRN	09-SEP-89	NOT GIVEN		104.8		12.0	
1643669	DRN	25-OCT-89	25-JAN-90		113.6	1.2	11.6	92
1643673	DRN	09-SEP-89	14-JAN-90		64.5	0.5	14.7	127
1643678	DRN	12-SEP-89	19-JAN-90	NO END DATE PROVIDED END DATE 9-19-90	231.0	1.8	8.4	129
1643679	DRH	11-SEP-89	11-DEC-89		276.6	3.0	7.7	91
1643680	DRH	12-SEP-89	19-JAN-90		110.1	0.9	11.8	129
1643688	DRN	12-SEP-89	NOT GIVEN		215.2		8.7	
1643997	DRH	07-SEP-89	07-DEC-89	NO END DATE PROVIDED	514.9	5.7	5.7	91
1644002	DRN	07-SEP-89	07-DEC-89		280.1	3.1	7.7	91
1644003	DRN	07-SEP-89	08-JAN-90		635.9	5.2	5.2	123
1644005	DRN	08-SEP-89	NOT GIVEN		148.6		10.3	
1644009	DRN	14-SEP-89	NOT GIVEN	NO END DATE PROVIDED	103.1		12.1	
1644011	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	80.3		13.5	

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1644014	DRN	05-SEP-89	NOT GIVEN	* - LESS THAN INDICATED VALUE NO END DATE PROVIDED	* 30.0			
1644015	DRN	05-SEP-89	07-DEC-89		76.8	0.8	13.7	93
1644025	DRN	13-SEP-89	13-DEC-89		530.7	5.8	5.7	91
1644027	DRN	07-SEP-89	08-JAN-90		593.8	4.8	5.4	123
1644031	DRN	05-SEP-89	05-DEC-89		83.8	0.9	13.2	91
1644107	DRN	13-SEP-89	13-DEC-89		162.8	1.8	10.2	89
1644108	DRN	13-SEP-89	13-DEC-89		206.5	2.3	8.9	89
1644234	DRN	12-SEP-89	26-DEC-89		38.2	0.4	18.0	103
1644319	DRN	09-SEP-89	10-DEC-89		57.5	0.6	15.4	92
1644320	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	113.6		11.6	
1644326	DRN	NOT GIVEN	30-DEC-89	NO START DATE PROVIDED	73.3		14.0	
1644330	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	31.2		19.2	
1644333	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	71.5		14.1	
1645093	DRN	05-SEP-89	NOT GIVEN	* - LESS THAN INDICATED VALUE NO END DATE PROVIDED	* 30.0			

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O.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645094	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	73.3		14.0	
1645099	DRN	05-SEP-89	31-DEC-89		54.0	0.5	15.8	117
1645100	DRN	05-SEP-89	06-JAN-90		71.5	0.6	14.1	123
1645102	DRN	05-SEP-89	05-DEC-89		111.8	1.2	11.7	91
1645104	DRN	15-SEP-89	10-DEC-89		92.6	1.1	12.7	86
1645106	DRN	05-SEP-89	08-DEC-89		85.6	0.9	13.1	94
1645110	DRN	05-SEP-89	05-DEC-89		54.0	0.6	15.8	91
1645112	DRN	05-SEP-89	10-DEC-89		101.3	1.1	12.2	96
1645117	DRN	05-SEP-89	05-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	*	0.3	91
1645119	DRN	05-SEP-89	13-DEC-89		106.6	1.1	12.0	99
1645122	DRN	05-SEP-89	05-DEC-89		66.3	0.7	14.6	91
1645123	DRN	05-SEP-89	17-DEC-89		92.6	0.9	12.7	103
1645127	DRN	05-SEP-89	28-NOV-89		55.8	0.7	15.6	84
1645137	DRN	05-SEP-89	15-DEC-89		117.1	1.2	11.5	101
1645139	DRN	05-SEP-89	NOT GIVEN	NO END DATE PROVIDED	64.5		14.7	

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06-FEB-90

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30-JAN-90

# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: LINA BECKER, BLDG ER-203  
5700 SOUTH CASS AVENUE  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645421	LBN	11-OCT-89	15-DEC-89		1035.4	15.9	4.1	65
1645422	DRN	12-SEP-89	16-DEC-89		36.5	0.4	18.3	95
1645427	DRN	12-SEP-89	19-DEC-89		117.1	1.2	11.5	98
1645431	DRN	12-SEP-89	26-DEC-89		113.6	1.1	11.6	105
1645434	DRN	12-SEP-89	19-DEC-89		174.9	1.8	9.6	98
1645462	DRN	16-OCT-89	16-JAN-90		38.2	0.4	18.0	92
1645465	DRN	07-SEP-89	10-DEC-89		73.3	0.8	14.0	94
1645479	DRN	07-SEP-89	08-DEC-89		92.6	1.0	12.7	92
1645590	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645591	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645596	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645598	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			

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# Radon Monitoring Report

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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645599	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645633	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645763	DRN	10-SEP-89	NOT GIVEN	* - LESS THAN INDICATED VALUE NO END DATE PROVIDED	* 30.0			
1645772	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	64.5		14.7	
1645773	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	197.7		9.1	
1645774	DRN	06-SEP-89	11-DEC-89	NO END DATE PROVIDED	131.1	1.4	10.9	96
1645780	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	66.3		14.6	
1645781	DRN	05-SEP-89	NOT GIVEN	NO END DATE PROVIDED	55.8		15.6	
1645786	DRN	05-SEP-89	06-DEC-89	NO END DATE PROVIDED	131.1	1.4	10.9	92
1645789	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	187.2		9.3	
1645790	DRN	11-SEP-89	11-DEC-89	NO END DATE PROVIDED	108.3	1.2	11.9	91
1645793	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	231.0		8.4	
1645798	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	138.1		10.7	

Q.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

ARGONNIE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNIE, IL 60439

**Tech Ops**  
**Radon Detection Products**  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645800	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	203.0		8.9	
1645801	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	152.2		10.2	
1645803	DRN	06-SEP-89	26-JAN-90		267.8	1.9	7.9	142
1645804	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED NO GOLD SEAL TAPE	68.0		14.4	
1645805	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	145.1		10.4	
1645809	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	124.1		11.2	
1645810	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	129.4		11.0	
1645813	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	136.4		10.7	
1645816	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	164.4		9.9	
1645820	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	73.0		13.9	
1645822	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	231.0		8.4	
1645860	DRN	08-AUG-89	08-DEC-89		55.8	0.5	15.6	122
1645871	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	82.1		13.4	
1645873	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED END DATE 12-89	92.6		12.7	

Q.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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**Tech Ops**  
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**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
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Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data - Comments	Exposure pCi/h days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645877	DRN	08-SEP-89	08-DEC-89	NO END DATE PROVIDED	68.0	0.7	14.4	91
1645890	DRN	07-SEP-89	NOT GIVEN		83.8		13.2	
1645897	DRN	11-OCT-89	15-DEC-89		1003.9	15.4	4.1	65
1645901	DRN	11-OCT-89	15-DEC-89	NO END DATE PROVIDED	1028.4	15.8	4.1	65
1645911	DRN	12-SEP-89	NOT GIVEN		108.8		12.2	
1645913	DRN	11-OCT-89	15-DEC-89		1074.0	16.5	4.0	65
1645915	DRN	11-OCT-89	15-DEC-89	NO END DATE PROVIDED	1054.7	16.2	4.0	65
1645917	DRN	11-OCT-89	15-DEC-89		1007.4	15.5	4.1	65
1645919	DRN	12-SEP-89	NOT GIVEN		136.4		10.7	
1645920	DRN	12-SEP-89	20-DEC-89	NO END DATE PROVIDED	302.9	3.1	7.4	99
1645922	DRN	12-SEP-89	NOT GIVEN		120.6		11.3	
1645925	DRN	12-SEP-89	19-DEC-89		82.1	0.8	13.4	98
1646026	DRN	11-OCT-89	15-DEC-89	NO END DATE PROVIDED	1023.2	15.7	4.1	65
1646029	DRN	11-OCT-89	15-DEC-89		1063.5	16.4	4.0	65
1646421	DRN	08-SEP-89	NOT GIVEN		157.4		10.1	

QC Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1646436	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	34.7		18.6	
1646497	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	36.5		18.3	
1646462	DRN	05-SEP-89	05-DEC-89		437.8	4.8	6.2	91
1646474	DRN	05-SEP-89	05-DEC-89		113.6	1.2	11.6	91
1646476	DRN	05-SEP-89	05-DEC-89		283.6	3.1	7.6	91
1646483	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	812.9		4.6	
1646490	DRN	05-SEP-89	NOT GIVEN	NO END DATE PROVIDED	364.2		6.8	
1646995	DRN	13-SEP-89	13-DEC-89		104.8	1.2	12.0	91
1647003	DRN	14-SEP-89	13-DEC-89		309.9	3.4	7.3	90
1647016	DRN	14-SEP-89	13-DEC-89		387.0	4.3	6.6	90
1647030	DRN	08-SEP-89	09-DEC-89		204.7	2.2	8.9	92
1647031	DRN	08-SEP-89	09-DEC-89		185.5	2.0	9.3	92
1647036	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	139.9		10.6	
1647435	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1647448	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1647460	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1647461	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1647462	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1647467	DRN	11-SEP-89	17-DEC-89		104.8	1.1	12.0	97
1647469	DRN	09-SEP-89	16-DEC-89		47.0	0.5	16.7	98
1647470	DRN	20-SEP-89	03-JAN-90	* - LESS THAN INDICATED VALUE	* 30.0	*	0.3	105
1647478	DRN	10-SEP-89	09-DEC-89		48.8	0.5	16.4	90
1647481	DRN	09-SEP-89	13-DEC-89		82.1	0.9	13.4	95
1647485	DRN	09-SEP-89	07-DEC-89		122.4	1.4	11.3	89
1647486	DRN	16-SEP-89	16-DEC-89		69.8	0.8	14.3	91
1647553	DRN	12-SEP-89	19-JAN-90		125.9	1.0	11.1	129
1647565	DRN	13-SEP-89	13-DEC-89		180.2	2.0	9.4	91

Q.C. Release DLH	Process No. A06712	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1648170	DRN	06-SEP-89	28-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3	113	
1648175	DRN	08-SEP-89	12-DEC-89		97.8	1.0	12.4	95
1648221	DRN	06-SEP-89	20-NOV-89		33.0	0.4	18.9	75
1648282	DRN	08-SEP-89	23-OCT-89		66.3	1.5	14.6	45
1648284	DRN	NOT GIVEN	11-DEC-89	NO START DATE PROVIDED	114.3		12.0	

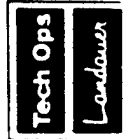
Q.C. Release DLH  
Process No. A06712  
Report Date 06-FEB-90  
Date Received 30-JAN-90

# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/h days	Avg Radon Conc. pCi/h	PCT STD DEV	NO. OF DAYS
1341742	DRNA	25-APR-89	NOT GIVEN	NO END DATE PROVIDED END DATE 4-26-90	48.5		14.6	
1347509	DRNA	25-MAR-89	15-JAN-90		30.9	0.1	16.4	296
1435998	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	94.0		11.7	
1435999	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	164.1		9.4	
1436000	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	372.7		6.6	
1436001	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	109.8		11.0	
1436002	DRNA	13-SEP-89	13-DEC-89		129.1	1.4	10.4	91
1436006	DRNA	13-SEP-89	13-DEC-89		71.2	0.8	12.9	91
1436022	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	122.1		10.6	
1436026	DRNA	13-SEP-89	13-DEC-89		162.4	1.8	9.4	91
1436031	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	111.6		11.0	
1436050	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	251.8		7.8	
1436054	DRNA	13-SEP-89	17-NOV-89		76.5	1.2	12.6	65
1436056	DRNA	13-SEP-89	21-NOV-89		137.8	2.0	10.1	69

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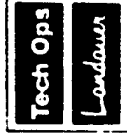
Q.C. Release DLH	Process No. A06719	Report Date 06-FEB-90	Date Received 30-JAN-90
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## Radon Monitoring Report

ARGONNIE NATIONAL LABORATORY  
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**Tech/Ops Landauer, Inc.**  
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2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1436058	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	78.3		12.5	
1436061	DRNA	14-SEP-89	27-JAN-90		153.6	1.1	9.7	135
1436062	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	120.3		10.7	
1436063	DRNA	13-SEP-89	13-DEC-89		285.1	3.1	7.4	91
1436064	DRNA	13-SEP-89	26-DEC-89		134.3	1.3	10.2	104
1436065	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	190.4		8.8	
1436068	DRNA	13-SEP-89	12-DEC-89		202.7	2.3	8.6	90
1436070	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	90.5		11.9	
1436073	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	134.3		10.2	
1436075	DRNA	13-SEP-89	24-JAN-90		153.6	1.2	9.7	133
1436083	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	125.6		10.5	
1436089	DRNA	13-SEP-89	13-DEC-89		158.9	1.7	9.5	91
1436095	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	101.0		11.4	
1436194	DRNA	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	207.9		8.5	
1436196	DRNA	13-SEP-89	19-DEC-89		150.1	1.5	9.8	97

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Q.C. Release DLH	Process No. A06719	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1436199	DRNA	13-SEP-89	13-DEC-89		243.0	2.7	8.0	91
1436203	DRNA	13-SEP-89	14-DEC-89		106.3	1.2	11.2	92
1436205	DRNA	NOT GIVEN	25-JAN-90	NO START DATE PROVIDED	116.8		10.8	
1436208	DRNA	NOT GIVEN	*25-JAN-90	NO START DATE PROVIDED	162.4		9.4	
1641513	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	113.6		11.6	
1641514	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	40.0		17.7	
1641516	DRN	12-SEP-89	12-DEC-89		85.6	0.9	13.1	91
1641521	DRN	12-SEP-89	NOT GIVEN		92.6		12.7	
1641526	DRN	12-SEP-89	13-DEC-89	NO END DATE PROVIDED	40.0	0.4	17.7	92
1641529	DRN	12-SEP-89	14-DEC-89		139.9	1.5	10.6	93
1641532	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1641534	DRN	12-SEP-89	NOT GIVEN		139.9		10.6	
1641546	DRN	12-SEP-89	12-DEC-89	NO END DATE PROVIDED	71.5	0.8	14.1	91
1641549	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	157.4		10.1	

Q.C. Release DLH	Process No. A05719	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

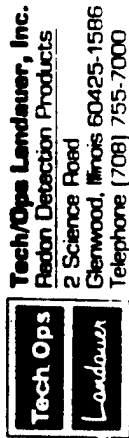
Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1642286	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	101.3		12.2	
1642289	DRN	11-OCT-89	15-DEC-89		1040.7	16.0	4.1	65
1642300	DRN	08-SEP-89	08-DEC-89		89.1	1.0	12.9	91
1642306	DRN	11-OCT-89	15-DEC-89		1014.4	15.6	4.1	65
1643197	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	134.6		10.8	
1643200	DRN	12-SEP-89	12-DEC-89		1037.2	11.4	4.1	91
1643203	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	141.6		10.5	
1643233	DRN	12-SEP-89	11-JAN-90		211.7	1.7	8.8	121
1643415	DRN	11-OCT-89	15-DEC-89		1061.7	16.3	4.0	65
1643427	DRN	11-OCT-89	15-DEC-89		1074.0	16.5	4.0	65
1643443	DRN	14-SEP-89	23-OCT-89		113.6	2.9	11.6	39
1643689	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	75.0		13.9	
1644095	DRN	07-OCT-89	NOT GIVEN	NO END DATE PROVIDED	254.1		8.3	
1644096	DRN	11-OCT-89	15-DEC-89		1096.8	16.9	4.0	65
1644204	DRN	03-SEP-89	17-DEC-89		495.6	4.8	5.9	103

Q.C. Release DLH	Process No. A06719	Report Date 06-FEB-90	Date Received 30-JAN-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063



Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1644206	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	94.3		12.6	
1644213	DRN	05-SEP-89	NOT GIVEN	NO END DATE PROVIDED	478.1		6.0	
1644224	DRN	11-SEP-89	11-DEC-89		68.0	0.7	14.4	91
1644225	DRN	11-SEP-89	18-JAN-90		34.7	0.3	18.6	129
1644227	DRN	13-SEP-89	12-DEC-89		257.3	2.9	8.0	90
1644232	DRN	11-SEP-89	19-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3	15.6	99
1644238	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	55.8		14.7	
1644240	DRN	NOT GIVEN	11-DEC-89	NO START DATE PROVIDED	64.5		13.5	
1644247	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	80.3		19.2	91
1644251	DRN	11-SEP-89	11-DEC-89		31.2	0.3		65
1644252	DRN	11-SEP-89	15-NOV-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.5	17.1	91
1644254	DRN	11-SEP-89	11-DEC-89		43.5	0.5	9.5	91
1644323	DRN	12-SEP-89	12-DEC-89		178.4	2.0	4.0	65
1645433	DRN	11-OCT-89	15-DEC-89		1079.2	16.6		98
1645475	DRN	06-SEP-89	13-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		

O.C. Release DLH	Process No. A06719	Report Date 06-FEB-90	Date Received 30-JAN-90
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## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1645630	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645762	DRN	NOT GIVEN	13-DEC-89	NO START DATE PROVIDED	55.8		15.6	
1645764	DRN	11-SEP-89	NOT GIVEN	NO END DATE PROVIDED	73.3		14.0	
1645766	DRN	10-SEP-89	10-DEC-89		41.7	0.5	17.4	91
1645769	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	40.0		17.7	
1645876	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED NO GOLD SEAL TAPE	38.2		18.0	
1645903	DRN	11-OCT-89	15-DEC-89		1044.2	16.1	4.1	65
1645909	DRN	11-OCT-89	15-DEC-89		863.7	13.3	4.5	65
1646034	DRN	11-OCT-89	15-DEC-89		991.6	15.3	4.2	65
1646422	DRN	08-SEP-89	08-DEC-89		200.1	2.2	9.3	91
1646423	DRN	08-SEP-89	08-DEC-89		199.5	2.2	9.0	91
1646425	DRN	10-SEP-89	10-DEC-89		43.3	0.5	16.9	91
1646427	DRN	NOT GIVEN	12-DEC-89	NO START DATE PROVIDED	59.3		15.2	
1646439	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	57.5		15.4	

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ARGONNE NATIONAL LABORATORY  
 ATTN: TINA BECKER, BLDG ER-203  
 9700 SOUTH CASS AVENUE  
 ARGONNE, IL 60439

Acct. No.

0400063

**Tech Ops**  
**Landauer**  
**Tech/Ops Landauer, Inc.**  
 Radon Detection Products  
 2 Science Road  
 Glenwood, Illinois 60425-1586  
 Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/d days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1646441	DRN	11-OCT-89	11-JAN-90	NO END DATE PROVIDED	166.2	1.8	9.8	92
1646442	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	38.2		18.0	
1646447	DRN	NOT GIVEN	11-DEC-89	NO START DATE PROVIDED	115.4		11.5	
1646451	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	61.0		15.1	
1646459	DRN	10-SEP-89	10-JAN-90		41.7	0.3	17.4	122
1646460	DRN	08-SEP-89	23-OCT-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.7		45
1646461	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	48.8		16.4	
1646463	DRN	05-SEP-89	10-DEC-89		509.7	5.3	5.8	96
1646477	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	90.8		12.8	
1646480	DRN	06-SEP-89	06-DEC-89		103.1	1.1	12.1	91
1646482	DRN	12-SEP-89	12-DEC-89		66.3	0.7	14.6	91
1646489	DRN	03-SEP-89	NOT GIVEN	NO END DATE PROVIDED	961.8		4.2	
1646491	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	78.5		13.6	
1646493	DRN	06-SEP-89	06-DEC-89		148.6	1.6	10.3	91
1646494	DRN	06-SEP-89	14-DEC-89		152.2	1.5	10.2	99

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ARGONNE NATIONAL LABORATORY  
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Telephone (708) 755-7000

Acct. No. 04000063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1646495	DRN	06-SEP-89	15-DEC-89	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	148.6	1.5	10.3	100
1647431	DRN	NOT GIVEN	NOT GIVEN		* 30.0			
1647444	DRN	NOT GIVEN	NOT GIVEN		* 30.0			
1647456	DRN	NOT GIVEN	NOT GIVEN		* 30.0			
1647500	DRN	NOT GIVEN	NOT GIVEN		* 30.0			
1647544	DRN	12-SEP-89	07-DEC-89	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	120.6	1.4	11.3	86
1647545	DRN	12-SEP-89	11-DEC-89		113.6	1.3	11.6	90
1647554	DRN	12-SEP-89	12-NOV-89		111.8	1.8	11.7	61
1647557	DRN	09-SEP-89	11-DEC-89		504.4	5.4	5.8	93
1648143	DRN	08-SEP-89	NOT GIVEN		89.1		12.9	
1648149	DRN	18-SEP-89	17-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		90
1648172	DRN	06-SEP-89	06-DEC-89		36.5	0.4	18.3	91
1648227	DRN	06-SEP-89	NOT GIVEN		134.6		10.8	

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## Radon Monitoring Report

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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1648234	DRN	15-OCT-89	03-JAN-90		187.2	2.3	9.3	80
1648243	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	45.3		16.9	
1648249	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	57.5		15.4	
1648251	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	2016.6		4.0	
1648252	DRN	08-SEP-89	07-DEC-89		599.0	6.7	5.3	90
1648253	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	139.9		10.6	
1648265	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	108.3		11.9	
1648273	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	301.1		7.4	
1648276	DRN	NOT GIVEN	06-DEC-89	NO START DATE PROVIDED	83.8		13.2	
1648277	DRN	NOT GIVEN	07-DEC-89	NO START DATE PROVIDED	371.2		6.7	
1648278	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	113.6		11.6	
1648281	DRN	08-SEP-89	11-DEC-89		99.6	1.1	12.3	94
1648286	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	52.3		16.0	

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## Radon Monitoring Report

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Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1436007	DRNA	13-SEP-89	31-JAN-90		227.0	1.6	8.5	140
1436025	DRNA	07-SEP-89	08-JAN-90		70.4	0.6	13.4	123
1436028	DRNA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	307.1		7.4	
1436032	DRNA	NOT GIVEN	05-FEB-90	NO START DATE PROVIDED	128.2		10.7	
1441183	DRN	07-SEP-89	07-FEB-90		330.5	2.2	7.3	153
1441185	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	86.4		13.5	
1441193	DRN	11-SEP-89	11-FEB-90		211.2	1.4	9.1	153
1441195	DRN	07-SEP-89	08-JAN-90		395.7	3.2	6.7	123
1441523	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	188.9		9.5	
1441540	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	207.5		9.1	
1441542	DRN	14-SEP-89	05-FEB-90		349.1	2.4	7.1	144
1442293	DRN	11-OCT-89	15-DEC-89		1005.0	15.5	4.3	65
1442303	DRN	11-OCT-89	15-DEC-89		1034.8	15.9	4.2	65
1442321	DRN	09-SEP-89	05-FEB-90		97.6	0.7	12.8	149
1442345	DRN	09-SEP-89	29-JAN-90		181.4	1.3	9.7	142

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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
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Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1642348	DRN	09-SEP-89	09-FEB-90		71.5	0.5	14.6	153
1643186	DRN	12-SEP-89	14-JAN-90		127.4	1.0	11.4	124
1643223	DRN	12-SEP-89	05-FEB-90		330.5	2.3	7.3	146
1643234	DRN	12-SEP-89	05-FEB-90		134.8	0.9	11.1	146
1643428	DRN	10-OCT-89	06-FEB-90		270.9	2.3	8.1	119
1643431	DRN	10-OCT-89	06-FEB-90		131.1	1.1	11.3	119
1643432	DRN	11-OCT-89	15-DEC-89		1109.4	17.1	4.1	65
1643648	DRN	09-SEP-89	03-FEB-90		71.5	0.5	14.6	147
1643660	DRN	12-SEP-89	06-FEB-90		229.9	1.6	8.7	147
1643674	DRN	12-SEP-89	06-FEB-90		137.2	1.1	10.4	147
1643690	DRN	12-SEP-89	28-JAN-90		138.6	1.0	11.0	138
1643692	DRN	13-SEP-89	13-DEC-89		62.2	0.7	13.4	91
1644008	DRN	14-SEP-89	14-DEC-89		166.5	1.8	10.1	91
1644010	DRN	14-SEP-89	21-DEC-89		51.0	0.5	16.7	98
1644201	DRN	06-SEP-89	05-FEB-90		231.7	1.5	8.7	152

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# Radon Monitoring Report

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Acct. No. 0400063

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCY STD DEV	NO. OF DAYS
1644208	DRN	06-SEP-89	05-FEB-90		198.2	1.3	9.3	152
1644228	DRN	11-SEP-89	06-FEB-90		69.6	0.5	14.7	148
1644233	DRN	10-SEP-89	05-FEB-90		62.2	0.4	15.4	148
1644246	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1644329	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	78.9		14.0	
1644337	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	69.6		14.7	
1645085	DRN	15-SEP-89	15-DEC-89		142.3	1.6	10.8	91
1645101	DRN	03-SEP-89	07-FEB-90		200.1	1.3	9.3	155
1645114	DRN	03-SEP-89	01-JAN-90		77.1	0.7	14.1	118
1645439	DRN	12-SEP-89	06-FEB-90		269.0	1.8	8.1	147
1645467	DRN	07-SEP-89	07-FEB-90		226.1	1.5	8.8	153
1645484	DRN	06-SEP-89	06-FEB-90		37.9	0.2	18.6	153
1645594	DRN	11-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1645595	DRN	11-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91

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## Radon Monitoring Report

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Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645653	DRN	11-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1645654	DRN	11-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1645658	DRN	11-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		91
1645787	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	192.6		9.4	92
1645791	DRN	09-OCT-89	09-JAN-90		583.9	6.3	5.6	147
1645792	DRN	06-SEP-89	31-JAN-90		198.2	1.3	9.3	99
1645796	DRN	07-SEP-89	15-DEC-89		118.1	1.2	11.8	150
1645812	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	116.2		11.9	152
1645814	DRN	09-SEP-89	06-FEB-90		293.2	2.0	7.8	154
1645817	DRN	06-SEP-89	09-FEB-90		205.7	1.4	9.2	152
1645839	DRN	08-SEP-89	09-FEB-90		69.6	0.5	14.7	152
1645863	DRN	09-SEP-89	08-FEB-90		78.9	0.5	14.0	153
1645872	DRN	08-SEP-89	08-FEB-90		88.3	0.6	13.4	11.5
1645880	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	125.5		11.5	15.2
1645883	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	64.0		15.2	

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## Radon Monitoring Report

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data - Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645889	DRN	08-SEP-89	10-FEB-90		125.5	0.8	11.5	155
1645892	DRN	16-OCT-89	09-FEB-90		116.2	1.0	11.9	116
1645907	DRN	11-OCT-89	15-DEC-89		1014.3	15.6	4.3	65
1645912	DRN	11-OCT-89	15-DEC-89		1120.6	17.2	4.0	65
1646424	DRN	10-SEP-89	06-FEB-90		95.7	0.6	12.9	149
1646429	DRN	10-SEP-89	06-FEB-90		82.7	0.6	13.7	149
1646432	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	56.6		16.0	
1646440	DRN	08-SEP-89	04-FEB-90		153.5	1.0	10.5	149
1646448	DRN	10-SEP-89	11-DEC-89		179.6	2.0	9.8	92
1646452	DRN	10-SEP-89	NOT GIVEN	NO END DATE PROVIDED	51.0		16.7	
1646464	DRN	05-SEP-89	07-FEB-90		684.5	4.4	5.2	155
1646472	DRN	05-SEP-89	07-FEB-90		1215.6	7.8	3.9	155
1646487	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	343.5		7.2	
1647022	DRN	08-SEP-89	07-FEB-90		883.9	5.8	4.6	152
1647472	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	121.8		11.6	

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## Radon Monitoring Report

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1647477	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	54.7		16.2	
1647488	DRN	09-SEP-89	NOT GIVEN	NO END DATE PROVIDED	179.6		9.8	
1647492	DRN	09-SEP-89	29-JAN-90		65.9	0.5	15.1	142
1647547	DRN	12-SEP-89	28-JAN-90		140.4	1.0	10.9	138
1647551	DRN	13-SEP-89	12-DEC-89		97.6	1.1	12.8	90
1647559	DRN	12-SEP-89	28-JAN-90		149.8	1.1	10.6	138
1647566	DRN	12-SEP-89	28-JAN-90		123.7	0.9	11.5	138
1648137	DRN	06-SEP-89	06-FEB-90	* - LESS THAN INDICATED VALUE	* 30.0	* 0.2		153
1648159	DRN	06-SEP-89	07-FEB-90	* - LESS THAN INDICATED VALUE	* 30.0	* 0.2		154
1648244	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	522.4		5.9	
1648245	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	168.4		10.1	
1648246	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	503.8		6.0	
1648266	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	257.8		8.2	
1648269	DRN	06-SEP-89	05-FEB-90		248.5	1.6	8.4	152
1648285	DRN	08-SEP-89	06-FEB-90		168.4	1.1	10.1	151

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Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO OF DAYS
1641180	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED	436.2		6.3	
1641557	DRN	11-SEP-89	03-MAR-90		227.9	1.3	8.4	172
1642288	DRN	03-SEP-89	19-JAN-90		226.1	1.7	8.5	133
1642291	DRN	11-OCT-89	15-DEC-89		1044.7	16.1	4.1	65
1642343	DRN	09-SEP-89	22-FEB-90		116.5	0.7	11.2	166
1643205	DRN	12-SEP-89	23-FEB-90		304.7	1.9	7.4	164
1643237	DRN	11-SEP-89	14-JAN-90		45.2	0.4	15.6	125
1643247	DRN	11-SEP-89	16-FEB-90		185.9	1.2	9.2	158
1643647	DRN	09-SEP-89	13-FEB-90		100.0	0.6	11.9	157
1643676	DRN	12-SEP-89	27-JAN-90		227.9	1.7	8.4	137
1643682	DRN	12-SEP-89	26-FEB-90		116.5	0.7	11.2	167
1643686	DRN	12-SEP-89	01-FEB-90		90.9	0.6	12.3	142
1643687	DRN	12-SEP-89	27-JAN-90		668.3	4.9	5.1	137
1643993	DRN	12-SEP-89	27-JAN-90		368.6	2.7	6.8	137
1644021	DRN	08-SEP-89	NOT GIVEN	NO END DATE PROVIDED	337.6		7.1	

QC Release MSR  
Process No. A07161  
Report Date 14-MAR-90  
Date Received 08-MAR-90

PAGE 1 OF 4

# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TIMA BECKER BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

**Tech Ops**  
**Radon Detection Products**  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

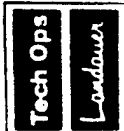
Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure PCU/days	Avg Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1644203	DRN	06-SEP-89	NOT GIVEN	NO END DATE PROVIDED	118.3		11.1	
1644205	DRN	06-SEP-89	16-FEB-90		227.9	1.4	8.4	163
1644338	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	182.3		9.3	
1645438	DRN	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	56.2		14.5	
1645576	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645577	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645578	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645646	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645647	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645648	DRN	NOT GIVEN	NOT GIVEN	* - LESS THAN INDICATED VALUE NO DATES PROVIDED	* 30.0			
1645767	DRN	10-SEP-89	22-FEB-90		39.7	0.2	16.2	163
1645838	DRN	09-SEP-89	08-DEC-89		58.0	0.6	14.4	90

# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000



Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure PC/Hr days	Avg. Radon Conc. pCi/l	PCT STD DEV	NO. OF DAYS
1645870	DRN	08-SEP-89	09-FEB-90	NO END DATE PROVIDED	96.4	0.5	12.0	154
1645891	DRN	02-DEC-89	19-FEB-90		235.3	3.0	8.3	79
1645905	DRN	11-OCT-89	15-DEC-89		953.4	14.7	4.3	65
1645914	DRN	11-OCT-89	15-DEC-89		1000.9	15.4	4.2	65
1645927	DRN	11-DEC-89	15-DEC-89		946.0	236.5	4.3	4
1646430	DRN	10-SEP-89	19-FEB-90		61.7	0.4	14.1	162
1646435	DRN	10-SEP-89	NOT GIVEN		112.8		11.3	
1646437	DRN	10-SEP-89	29-DEC-89		30.6	0.3	17.4	110
1647549	DRN	12-SEP-89	01-FEB-90		78.1	0.6	13.0	142
1648167	DRN	06-SEP-89	24-FEB-90		47.0	0.3	15.4	171
1648173	DRN	29-OCT-89	19-FEB-90	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		113
1648222	DRN	06-SEP-89	19-FEB-90	* - LESS THAN INDICATED VALUE	* 30.0	* 0.2		166
1648235	DRN	07-SEP-89	NOT GIVEN	NO END DATE PROVIDED CUST. HAS 3-21-90 END DATE	363.2		6.8	
1648237	DRN	01-OCT-89	19-FEB-90		162.2	1.2	9.8	141

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

Q.C. Release KSR	Process No. A07161	Report Date 14-MAR-90	Date Received 08-MAR-90
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PAGE 3 OF 4

## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG EP-203  
9700 SOUTH CAGE AVENUE  
ARGONNE, IL 60439

**Tech Ops**  
**Landauer**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/m days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1648260	DRN	29-SEP-89	NOT GIVEN	NO END DATE PROVIDED	346.7		7.0	
1648262	DRN	NOT GIVEN	NOT GIVEN	NO DATES PROVIDED	112.8		11.3	
1648264	DRN	NOT GIVEN	25-FEB-90	NO START DATE PROVIDED	313.8		7.3	
1648275	DRN	NOT GIVEN	17-FEB-90	NO START DATE PROVIDED CUST. HAS START DATE 10/89 NO DAY DATE	253.5		8.0	
1648283	DRN	11-OCT-89	15-DEC-89		997.2	15.3	4.2	65

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

QC Release KSR

Process No.  
A07161

Report Date  
14-MAR-90

Date Received  
08-MAR-90

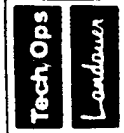
PAGE 4 OF 4

## Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Minn 55042-1586  
Telephone (708) 755 7000



Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc. pCi/l	
1341726	DRHA	01-OCT-89	22-FEB-90		238 4	1.7	
1436003	DRHA	13-SEP-89	NOT GIVEN	NO END DATE PROVIDED	123 2		
1436027	DRHA	12-SEP-89	NOT GIVEN	NO END DATE PROVIDED	209 1		

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

O.C. Release KSR	Process No A07161	Report Date 14-MAR-90	Date Received 08-MAR-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-202  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Accl. No. 0400063

**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1644207	DRN	05-SEP-89	03-MAR-90		290.1	1.6	7.6	179

PAGE 1 OF 1

O.C. Release DLH	Process No. A071B2	Report Date 20-MAR-90	Date Received 08-MAR-90
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ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60429

## Radon Monitoring Report

**Tech Ops**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Acct. No. 0400063

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/ft days	Avg Radon Conc pCi/ft	PCT STD DEV	NO. OF DAYS
1341788	DRNA	29-APR-89	10-MAR-90		51.0	0.2	14.6	315
1436020	DRNA	13-SEP-89	07-FEB-90		173.8	1.2	9.3	147
1641177	DRN	07-SEP-89	10-MAR-90		618.7	3.4	5.3	184
1642301	DRN	08-SEP-89	13-MAR-90		714.5	3.8	4.9	186
1642309	DRN	08-SEP-89	13-MAR-90		622.4	3.3	5.3	186
1642311	DRN	06-SEP-89	07-MAR-90		452.6	2.5	6.1	182
1642315	DRN	08-SEP-89	13-MAR-90		665.7	3.6	5.1	186
1643426	DRN	11-OCT-89	15-DEC-89		1023.3	13.7	4.1	65
1643449	DRN	11-OCT-89	15-DEC-89		1016.1	13.6	4.2	65
1643649	DRN	11-SEP-89	15-DEC-89		315.3	3.3	7.2	95
1643991	DRN	07-SEP-89	12-MAR-90		436.3	2.3	6.2	186
1643994	DRN	07-SEP-89	10-MAR-90		349.6	1.9	6.9	184
1644024	DRN	07-SEP-89	08-MAR-90		701.8	3.9	5.0	182
1644331	DRN	09-SEP-89	10-MAR-90		163.6	0.9	9.7	182
1645087	DRN	07-SEP-89	08-MAR-90		676.5	3.7	5.1	182

①	②	③	④	⑤
O.C. Release DLH	Process No A07358	Report Date 28-MAR-90	Date Received 21-MAR-90	PAGE 1 OF 3

# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

**Tech Ops**  
**Landauer**  
**Tech/Ops Landauer, Inc.**  
Radon Detection Products  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg. Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1645092	DRN	07-SEP-89	08-MAR-90	* - LESS THAN INDICATED VALUE	896.9	4.9	4.4	182
1645683	DRN	10-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		92
1645684	DRN	10-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		92
1645686	DRN	10-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		92
1645701	DRN	10-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		92
1645702	DRN	10-SEP-89	11-DEC-89	* - LESS THAN INDICATED VALUE	* 30.0	* 0.3		92
1645924	DRN	11-OCT-89	15-DEC-89	* - LESS THAN INDICATED VALUE	945.7	14.5	4.3	65
1646033	DRN	11-OCT-89	15-DEC-89		873.4	13.4	4.5	65
1646041	DRN	11-OCT-89	13-DEC-89		954.7	15.2	4.3	63
1646045	DRN	08-SEP-89	13-MAR-90		449.0	2.4	6.1	186
1646465	DRN	08-SEP-89	13-MAR-90		1090.2	5.9	4.0	186
1646466	DRN	08-SEP-89	13-MAR-90		243.0	1.3	8.1	186
1646468	DRN	08-SEP-89	13-MAR-90		924.0	9.0	4.4	186
1646471	DRN	08-SEP-89	13-MAR-90		649.4	3.9	5.2	186
1647480	DRN	09-SEP-89	13-MAR-90		85.9	0.5	12.5	185

Q.C. Release DLH	Process No. A07358	Report Date 28-MAR-90	Date Received 21-MAR-90
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# Radon Monitoring Report

ARGONNE NATIONAL LABORATORY  
ATTN: TINA BECKER, BLDG ER-203  
9700 SOUTH CASS AVENUE  
ARGONNE, IL 60439

Acct. No. 0400063

**Tech Ops**  
**Radon Detection Products**  
2 Science Road  
Glenwood, Illinois 60425-1586  
Telephone (708) 755-7000

**Tech Ops**  
**Landauer**

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/days	Avg Radon Conc pCi/l	PCT STD DEV	NO. OF DAYS
1648231	DRN	08-SEP-89	13-MAR-90		517.6	2.8	5.7	186
1648232	DRN	08-SEP-89	13-MAR-90		281.0	1.5	7.6	186
1648236	DRN	08-SEP-89	13-MAR-90		718.1	3.9	4.9	186
1648238	DRN	08-SEP-89	13-MAR-90		580.8	3.1	5.4	186
1648240	DRN	08-SEP-89	13-MAR-90		559.1	3.0	5.5	186
1648241	DRN	08-SEP-89	13-MAR-90		449.0	2.4	6.1	186
1648256	DRN	08-SEP-89	13-MAR-90		700.0	3.8	5.0	186
1648261	DRN	08-SEP-89	13-MAR-90		586.2	3.2	5.4	186

① ② ③ ④ ⑤ ⑥

PAGE 3 OF 3

O.C. Release DLH	Process No. A07358	Report Date 28-MAR-90	Date Received 21-MAR-90
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## NOTICE

Standard deviation values for six detectors analyzed by Tech/Ops Landauer do not appear in the preceding report sheets. However, those standard deviation values were reported by telephone by Tech/Ops Landauer to Argonne personnel on April 3, 1990. Those verbally reported standard deviations are tabulated below. They also have been inserted into the appropriate tables of Appendix F.

<u>Detector Number</u>	<u>Percent Standard Deviation</u>
1647020	8.2
1647025	7.4
1647028	6.5
1647032	8.0
1647033	7.3
1647034	9.9

## **Appendix I**

### **Graphic Display of Results for Each Monitored Property**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

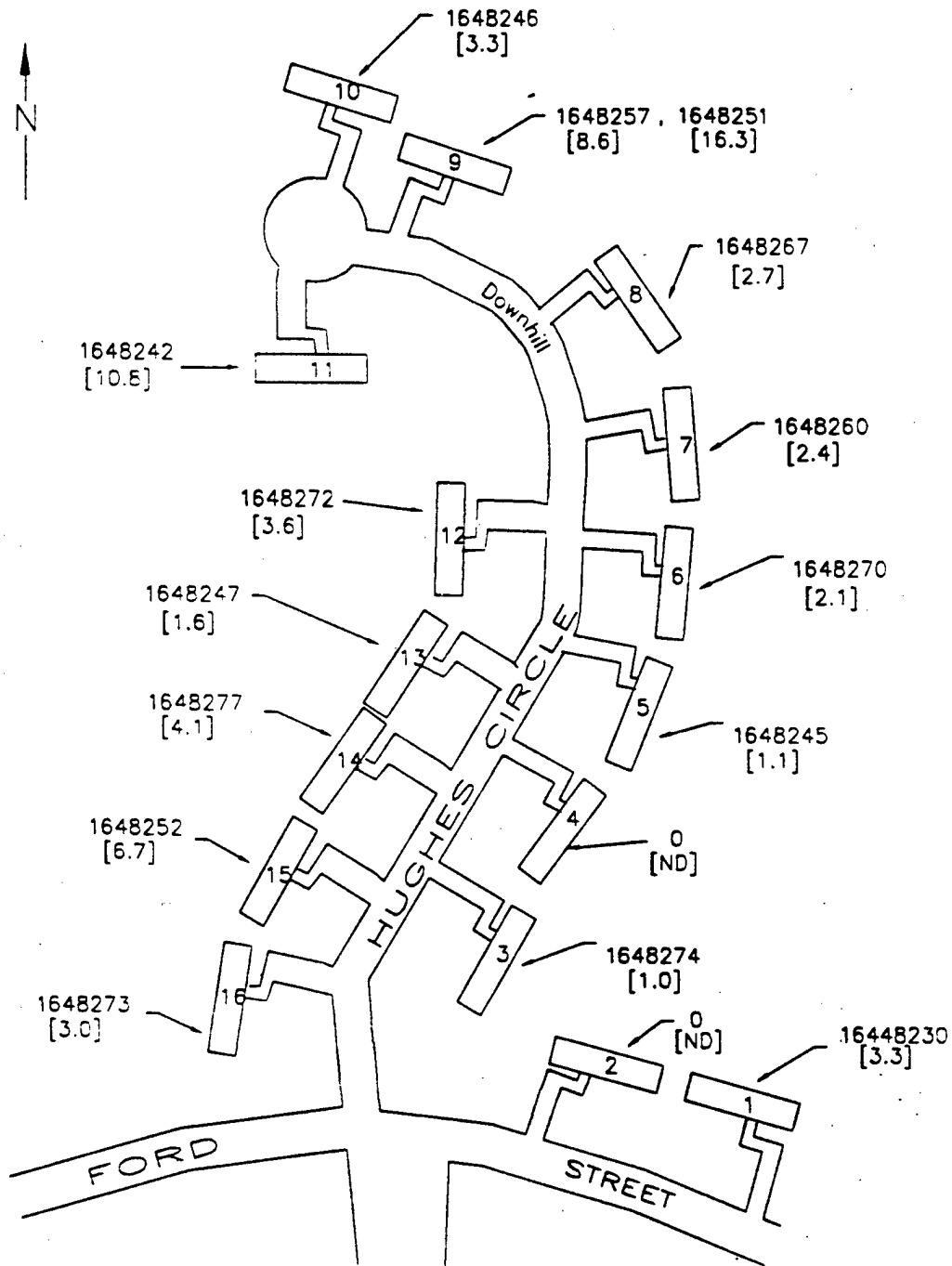
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

**Ansonia Army Housing  
Ansonia, Connecticut  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

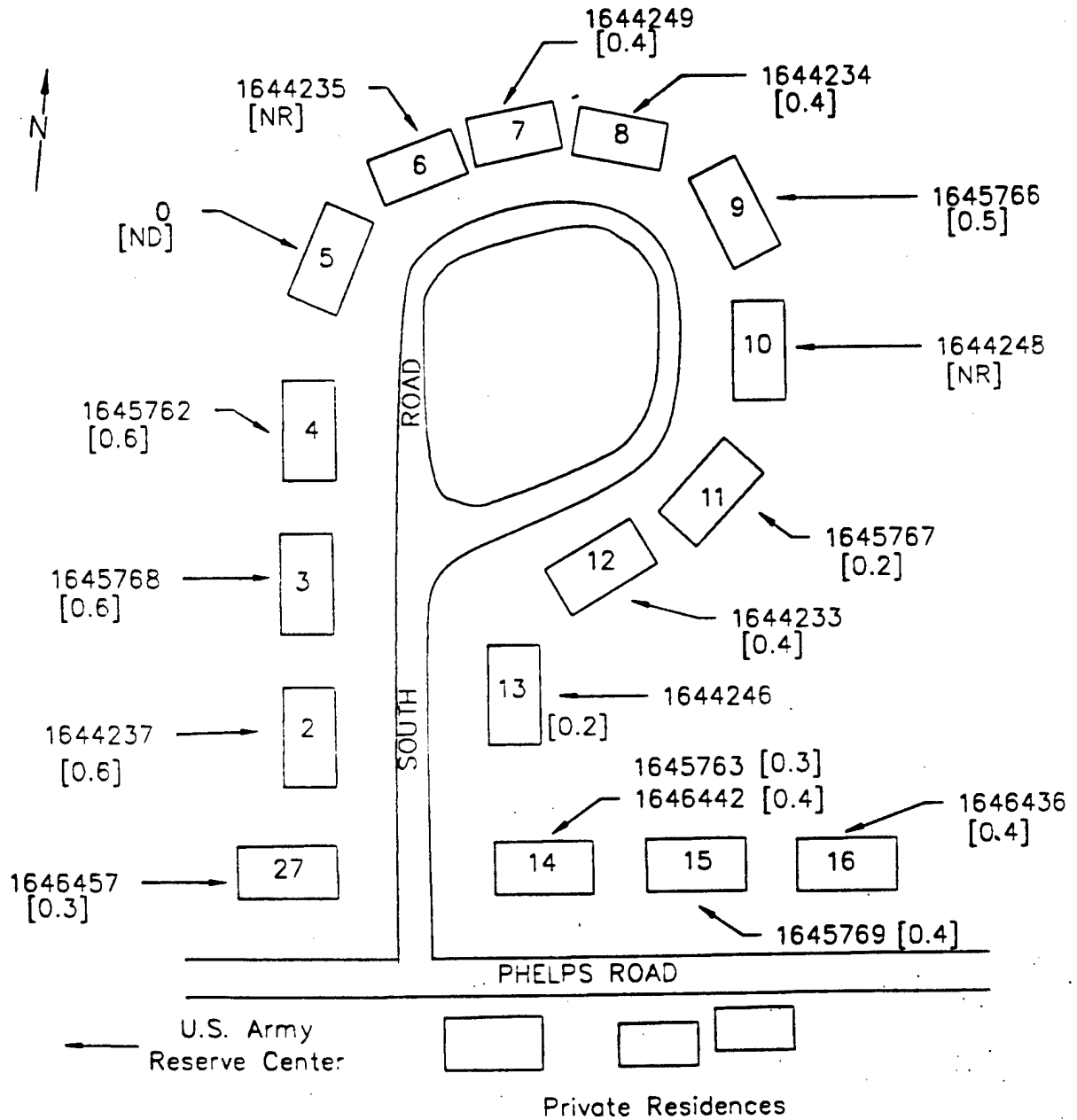
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# **East Windsor Army Housing East Windsor, Connecticut Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

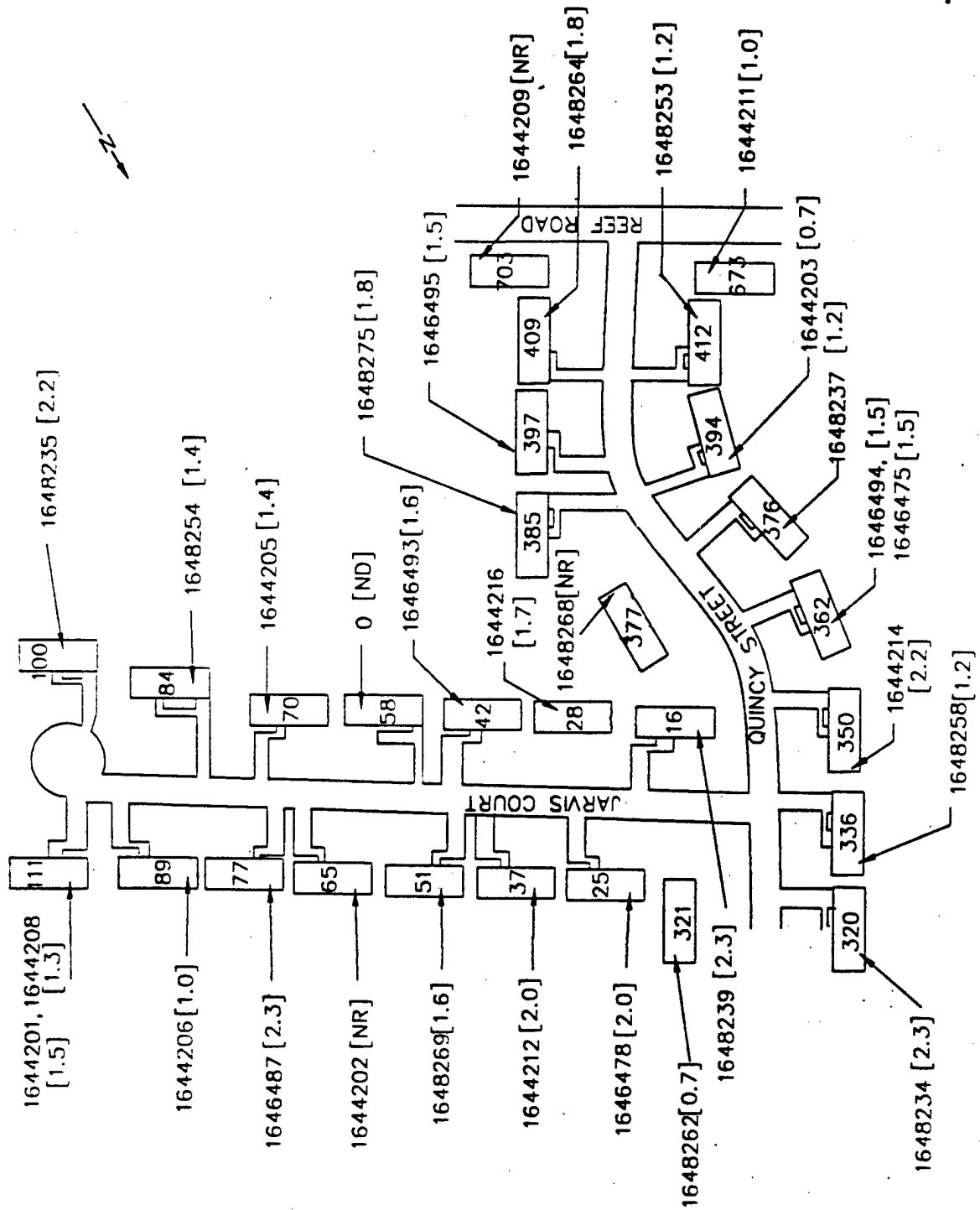
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

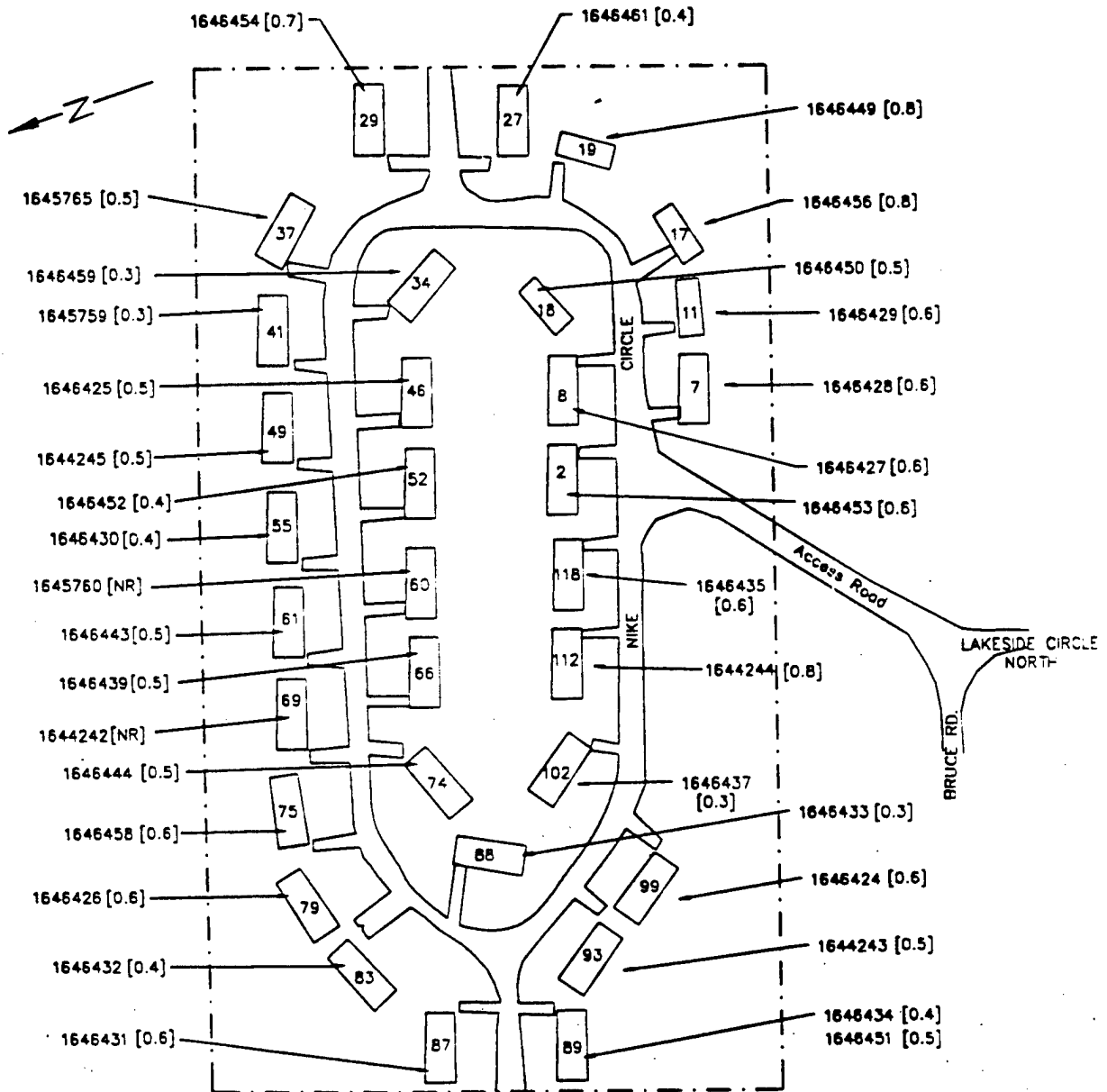
**Fairfield Army Housing  
Fairfield, Connecticut  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number  
 [ ] Radon Concentration in pCi/L  
 [NR] Detector Not Returned  
 [ND] No Data For This Location  
 [ ] [ ] Field Replicate  
 ( ) Unit or Apartment Number

**Manchester Army Housing  
 Manchester, Connecticut  
 Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

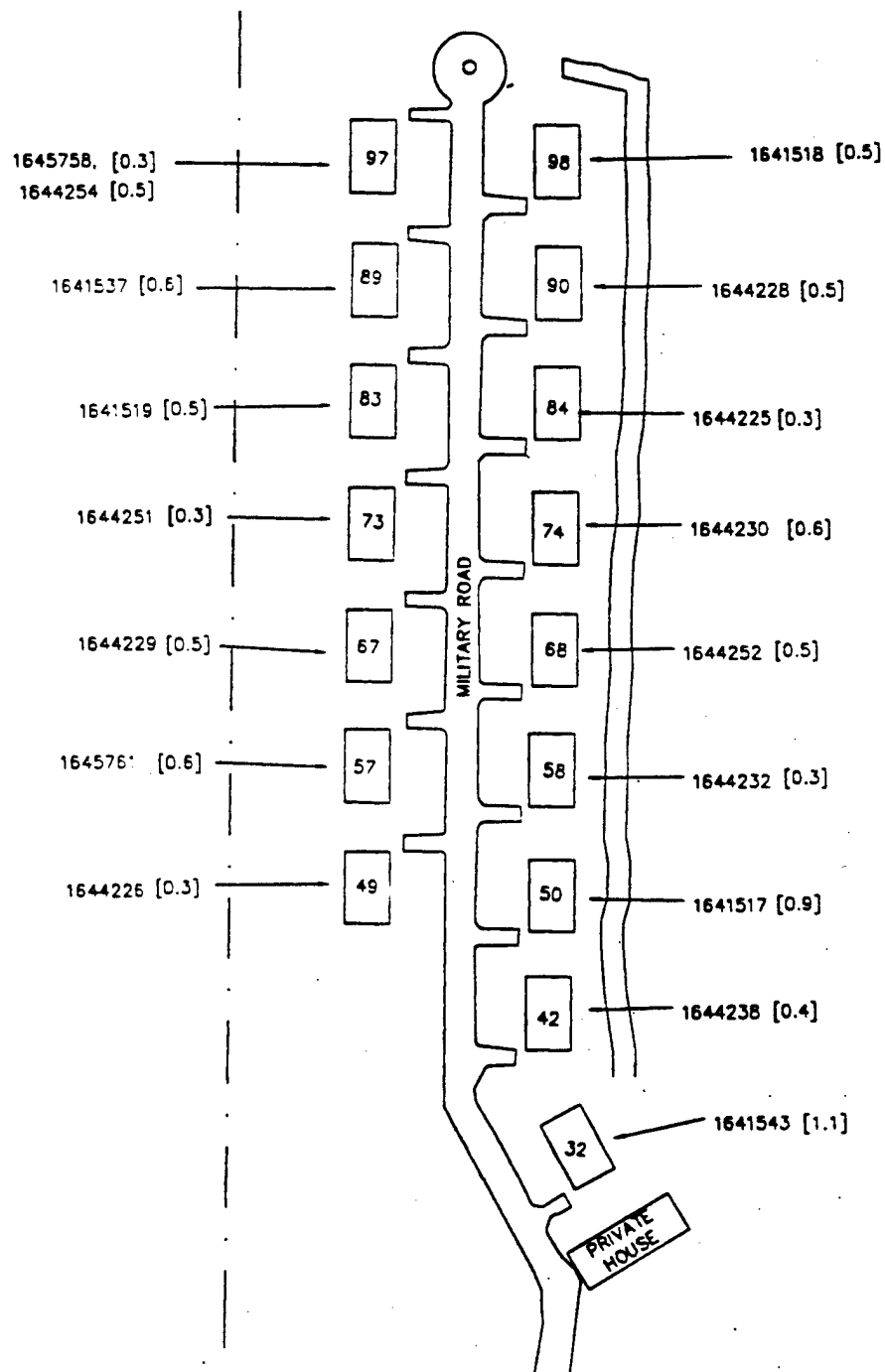
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

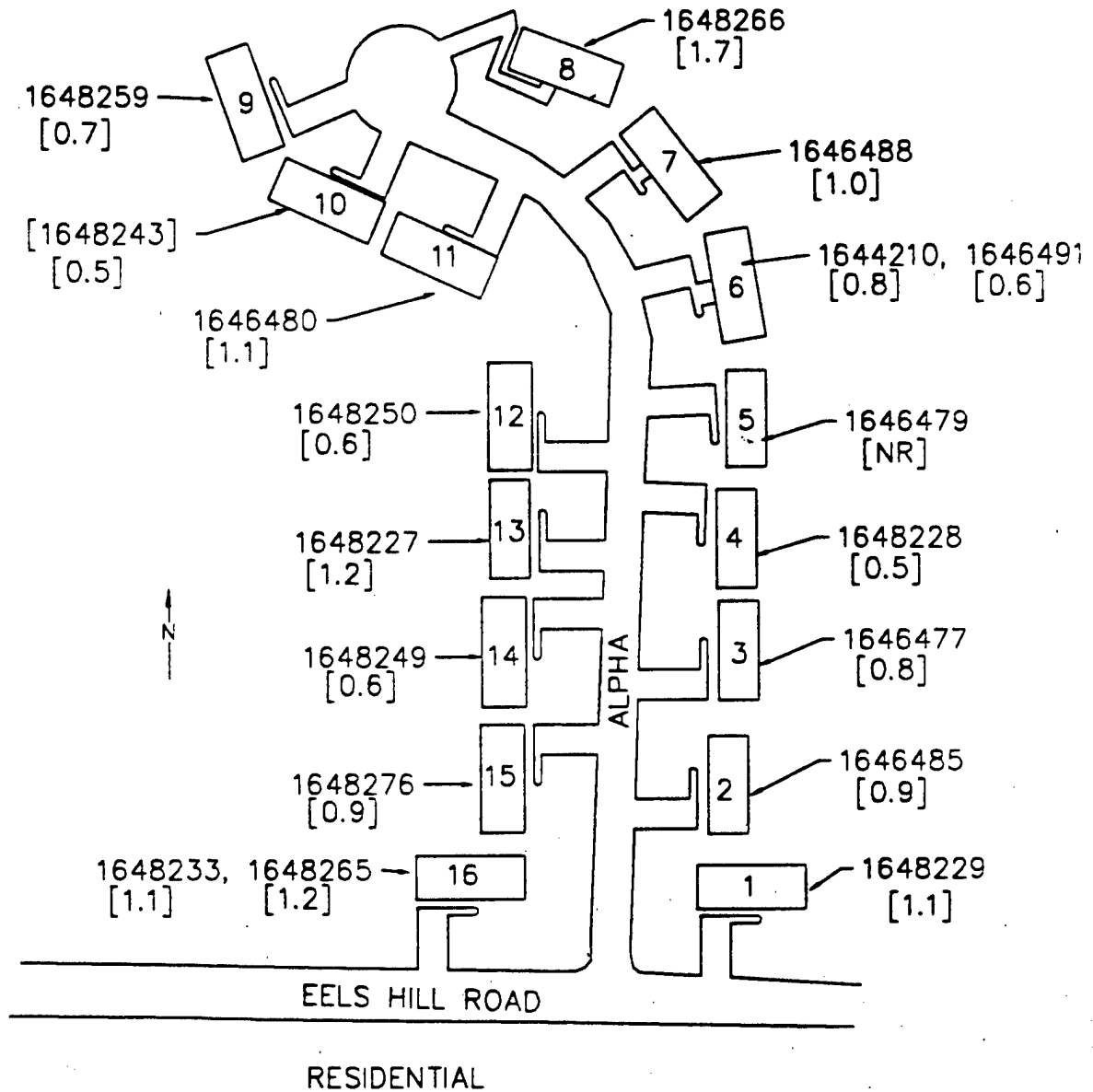
( ) Unit or Apartment Number

**Middletown Army Housing  
Middletown, Connecticut  
Indoor Radon Concentrations**



**KEY**  
 Seven-digit Number is Monitor Serial Number  
 [ ] Radon Concentration in pCi/L  
 [NR] Detector Not Returned  
 [ND] No Data For This Location  
 [ ] [ ] Field Replicate  
 ( ) Unit or Apartment Number

**Milford Army Housing  
 Milford, Connecticut  
 Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

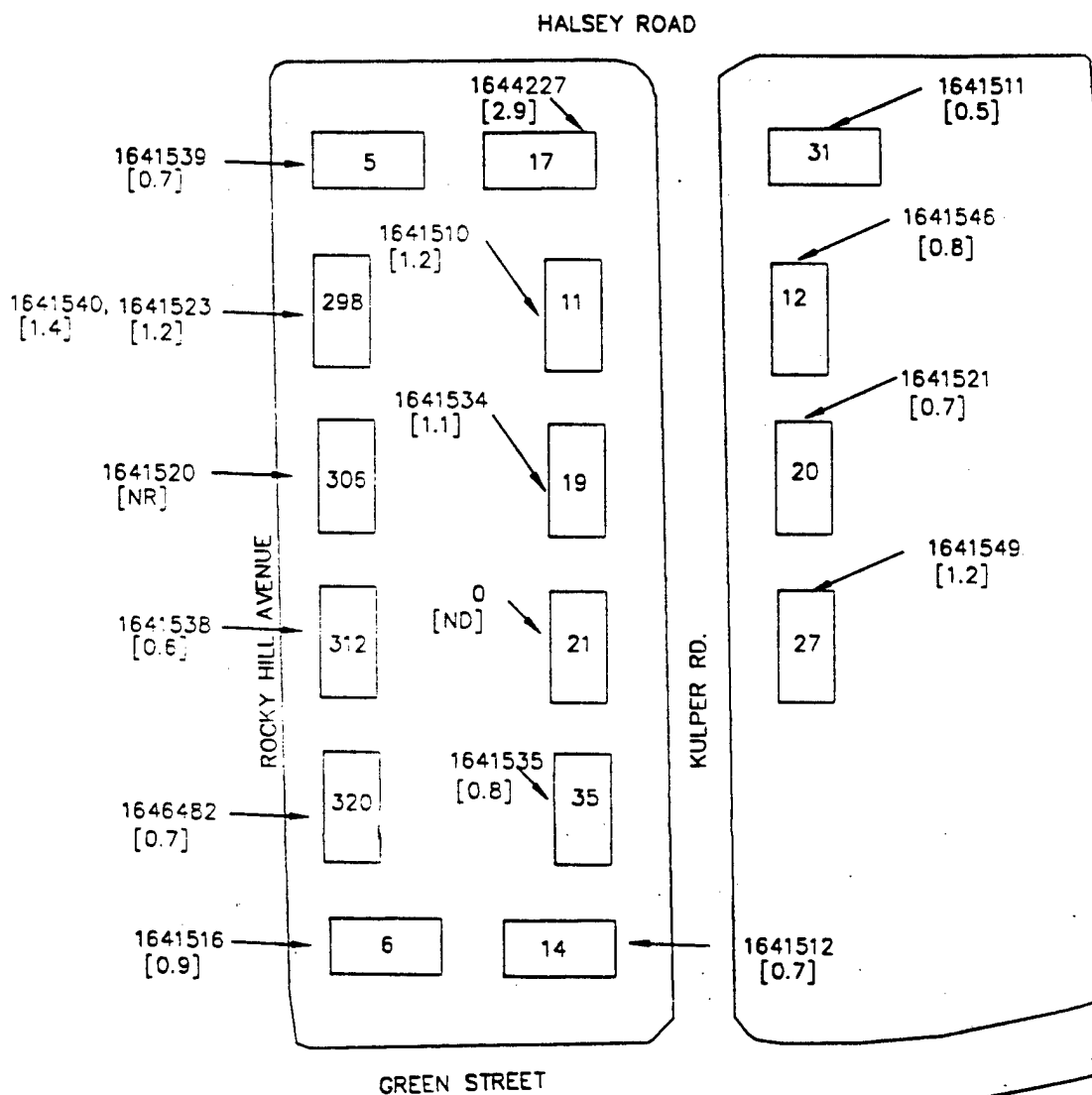
[NR] Detector Not Returned

[ND] No Data For This Location

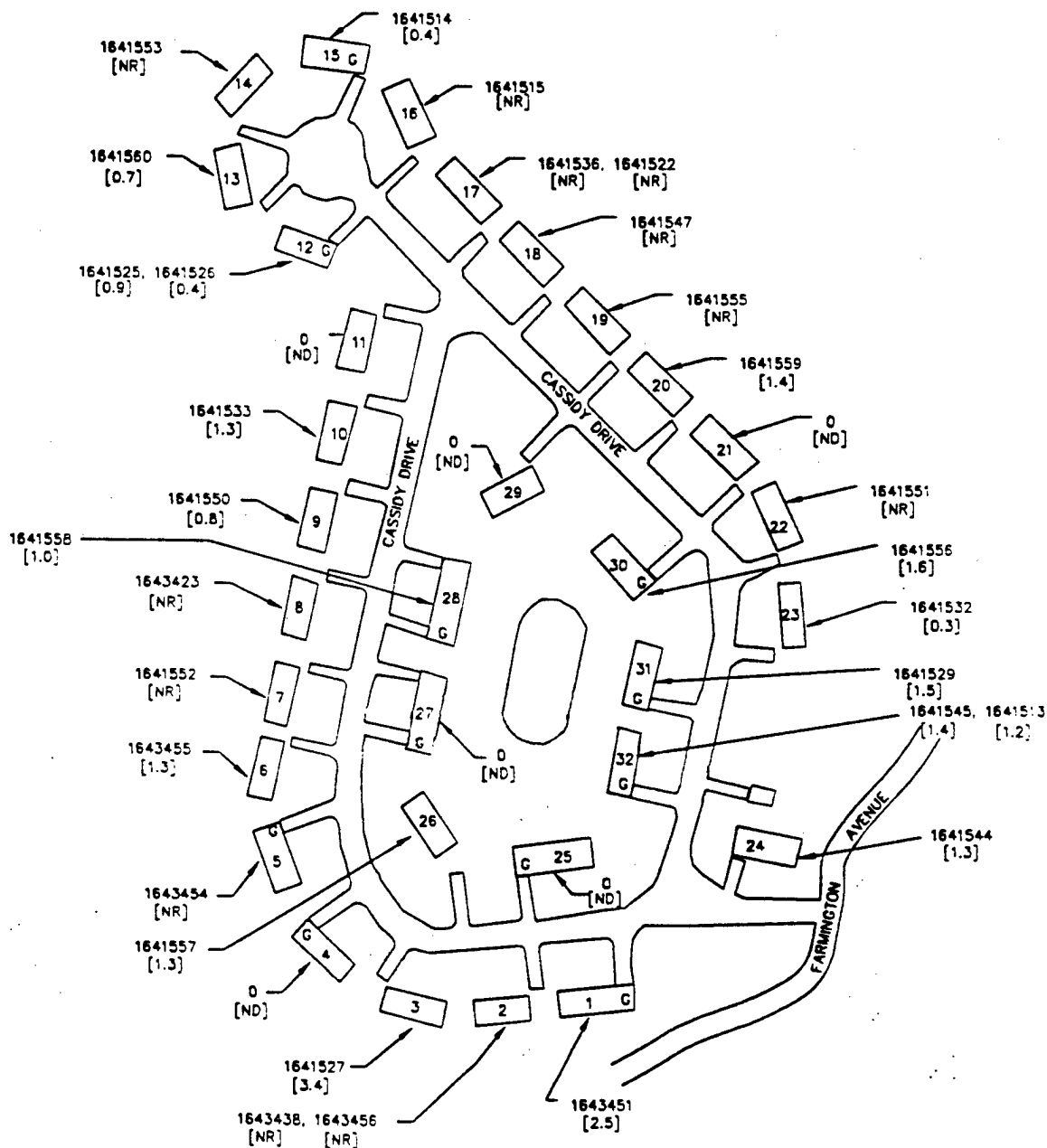
[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# New Britain Army Housing New Britain, Connecticut Indoor Radon Concentrations







**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

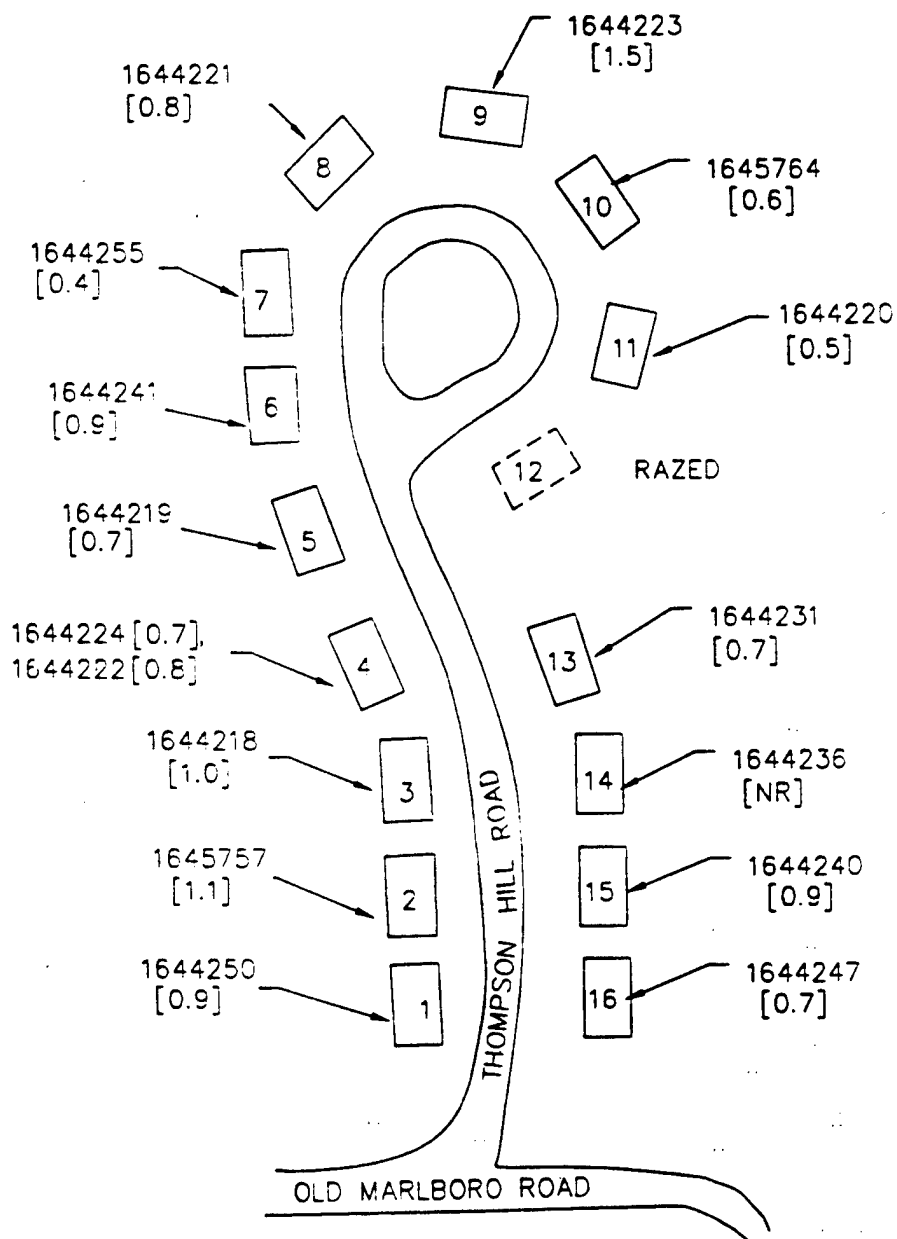
[NR] Detector Not Returned

[ND] No Data For This Location

[ ][ ] Field Replicate

( ) Unit or Apartment Number

# Portland Army Housing Portland, Connecticut Indoor Radon Concentrations



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

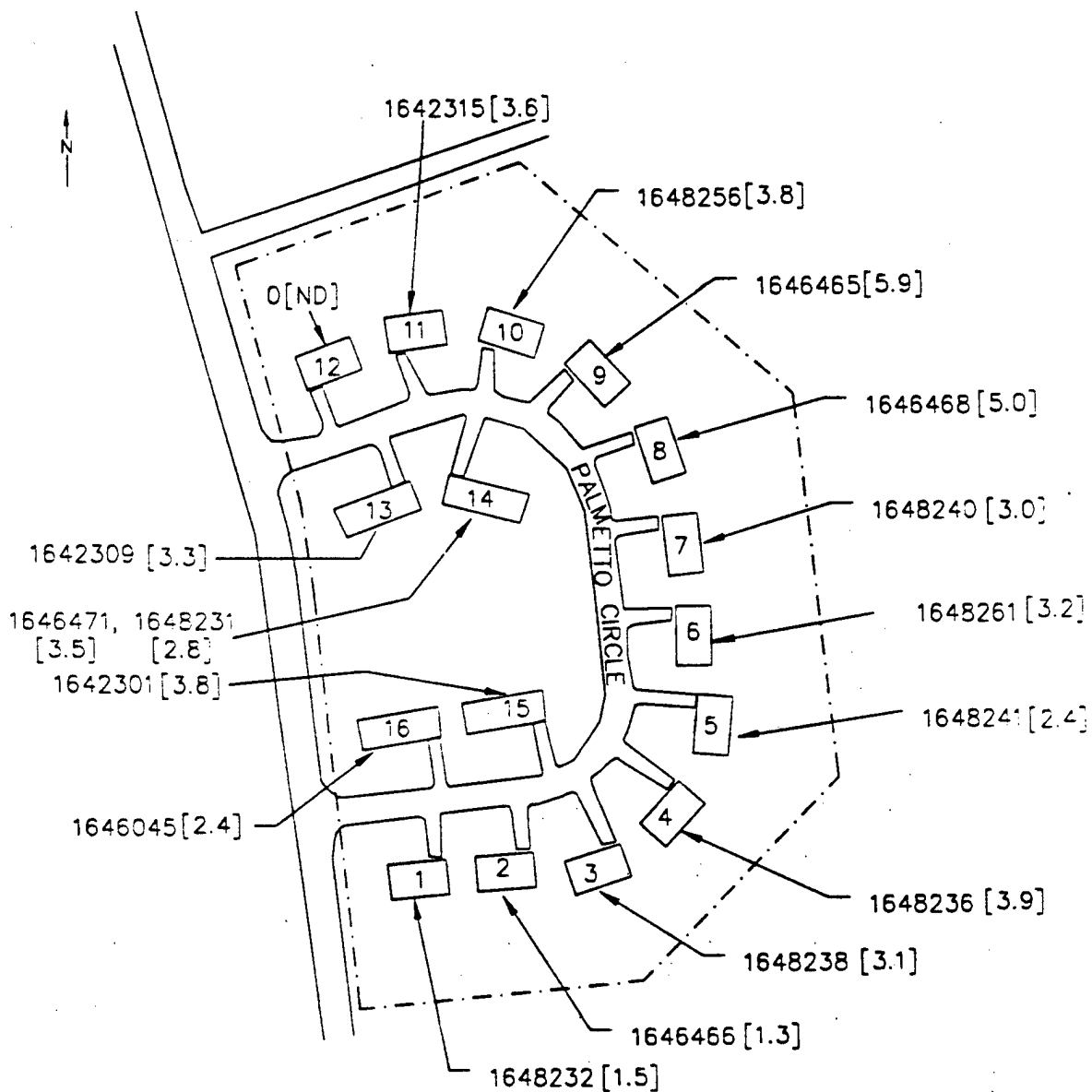
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

**Shelton Army Housing  
Shelton, Connecticut  
Indoor Radon Concentrations**



# Westport Army Housing Westport, Connecticut Indoor Radon Concentrations

## KEY

Seven-digit Number is Monitor Serial Number

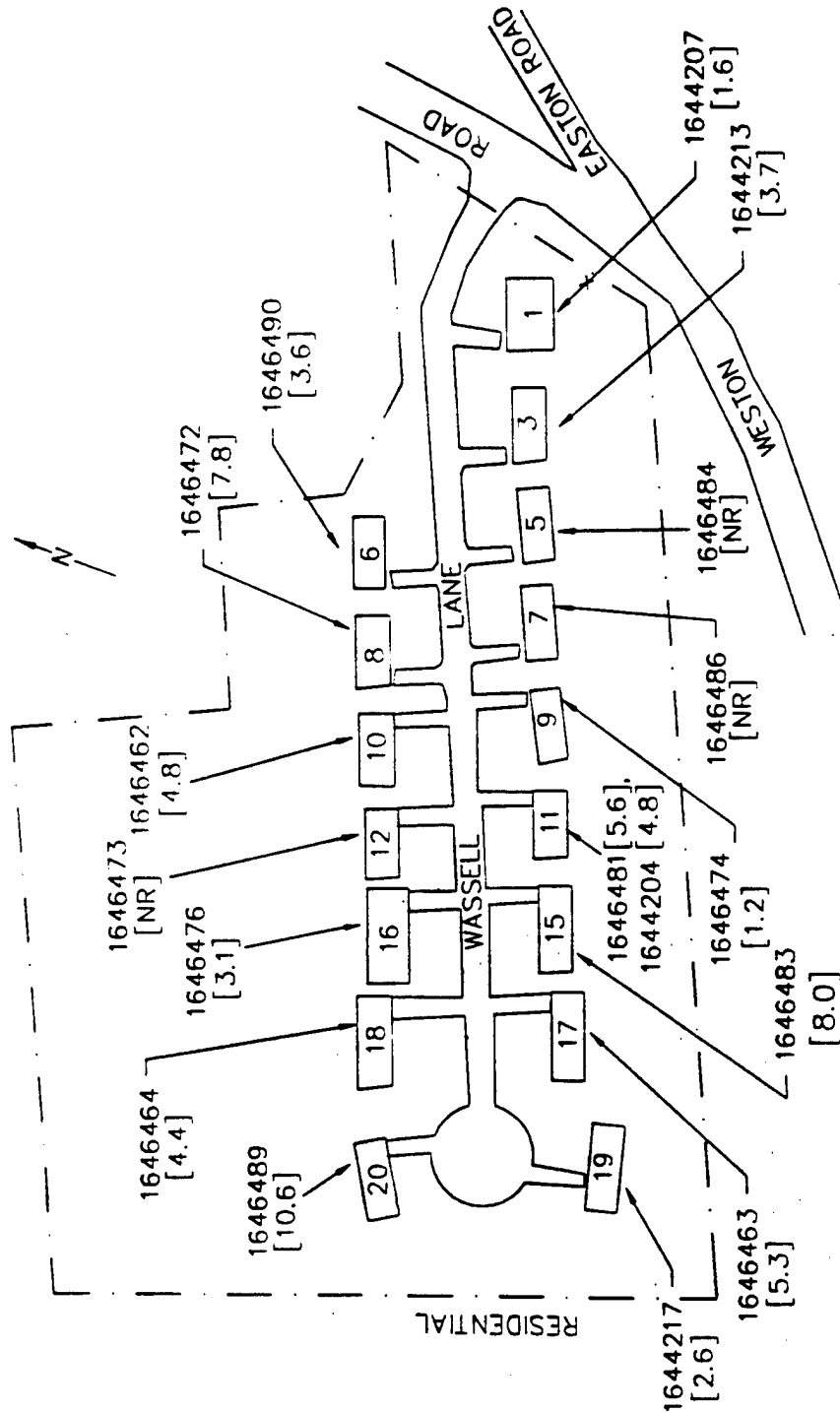
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

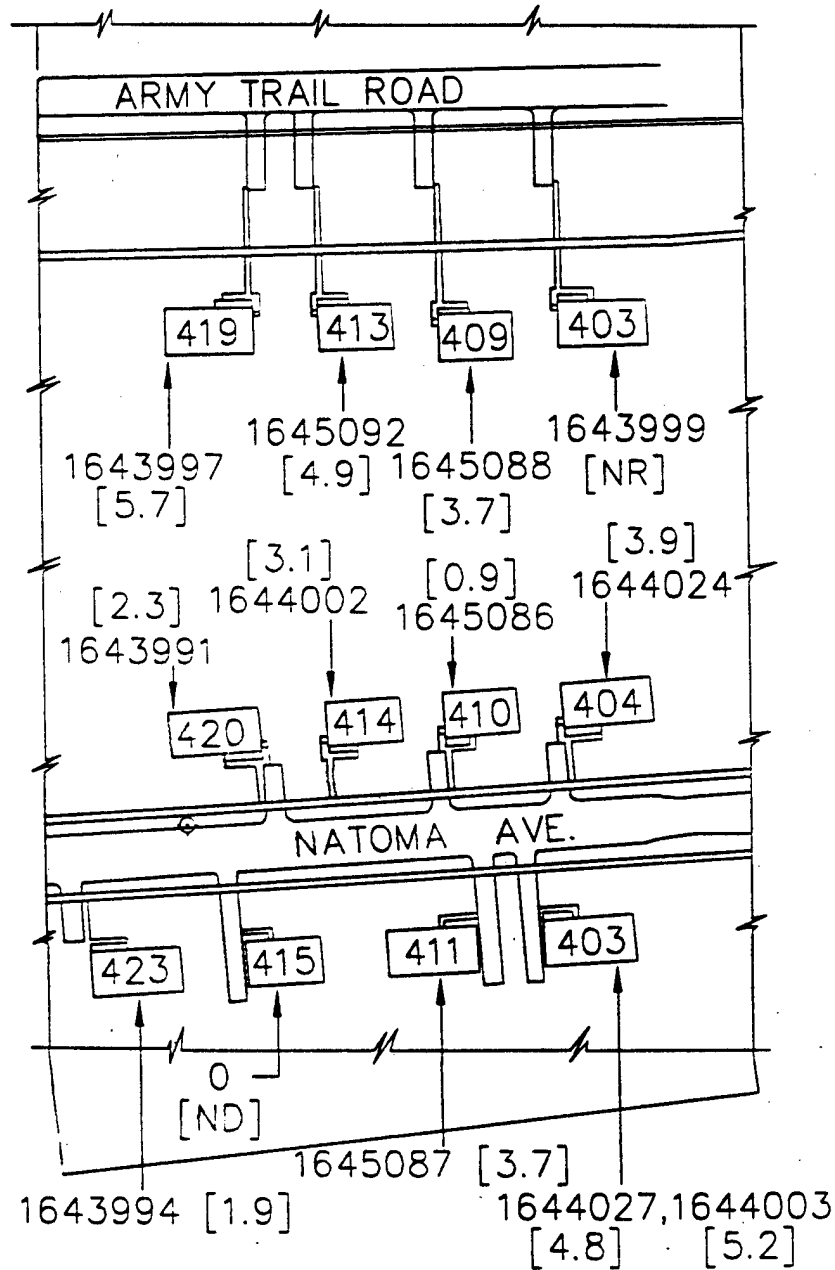
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

**Addison Army Housing  
Addison, Illinois  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

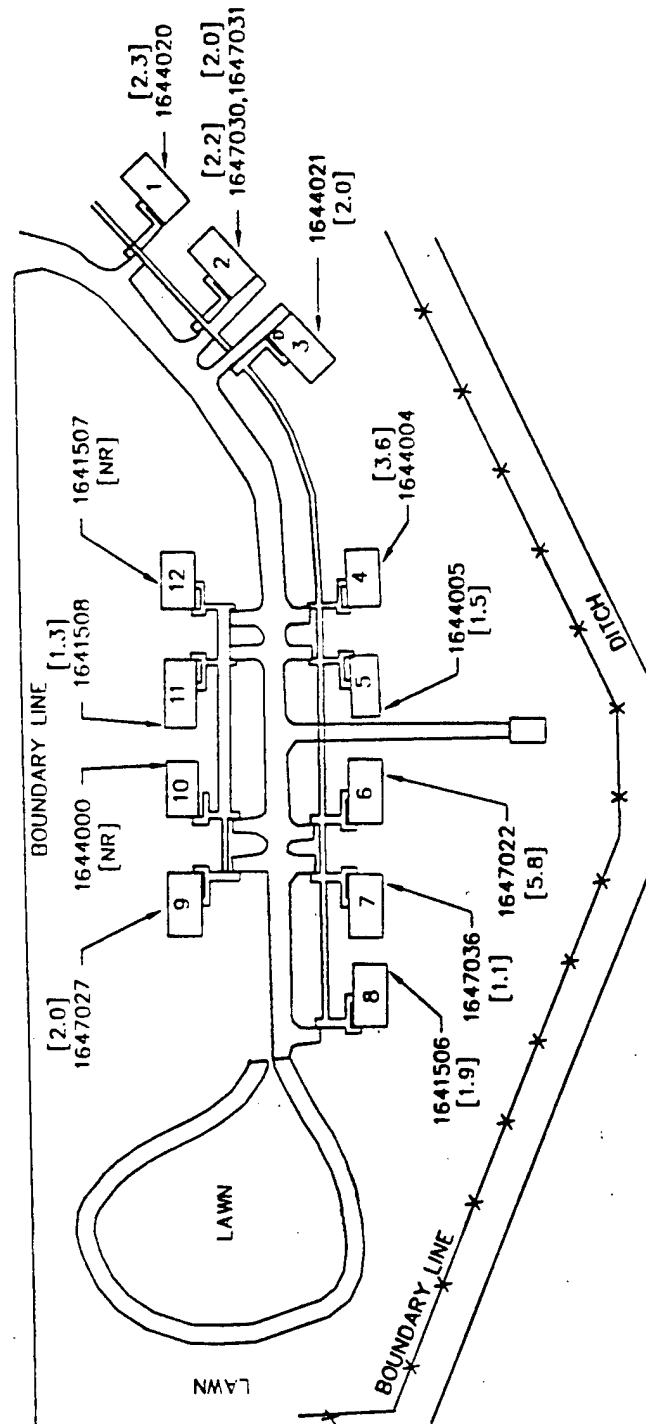
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

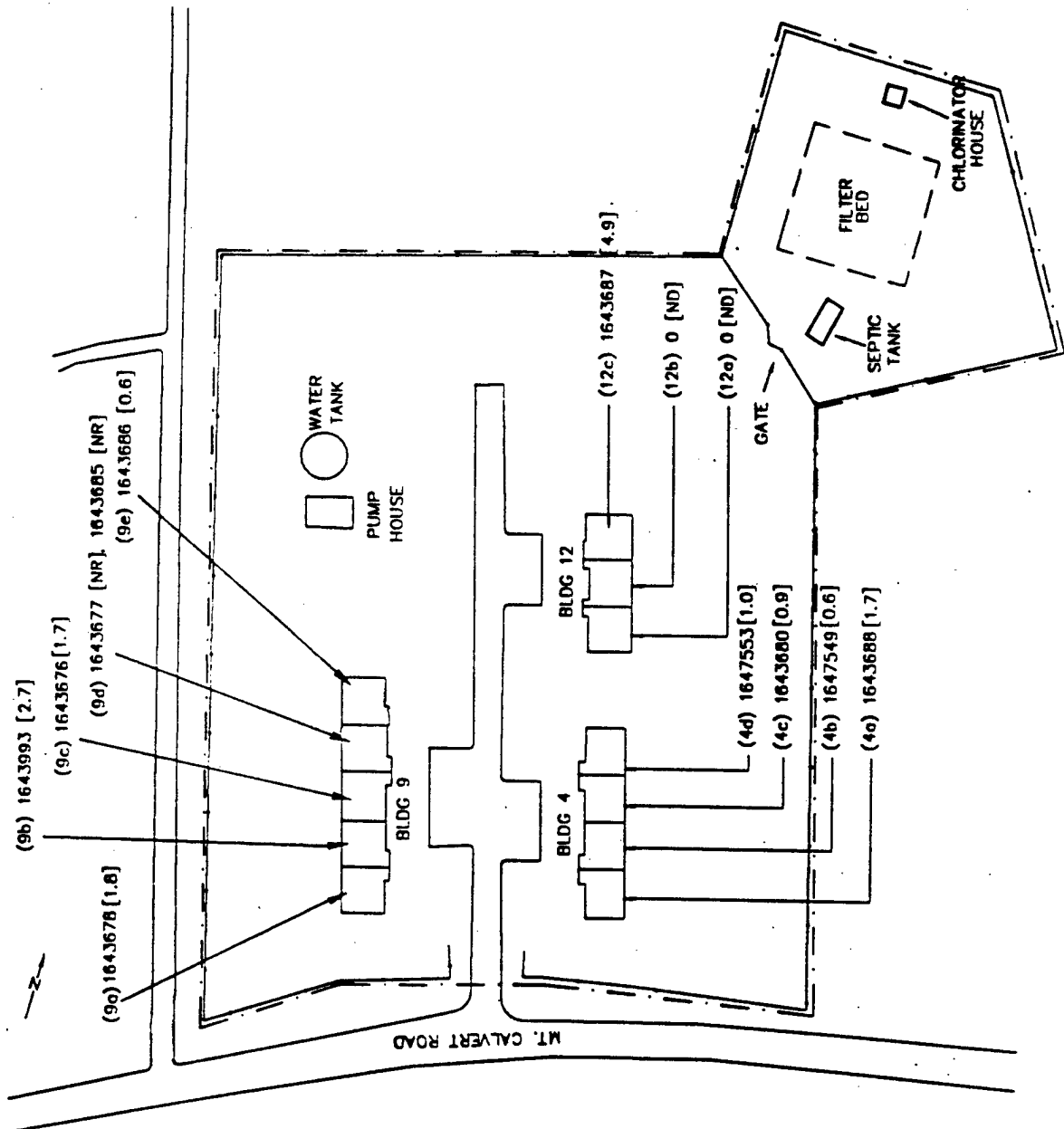
( ) Unit or Apartment Number

# Worth Army Housing Worth, Illinois Indoor Radon Concentrations



# Croom Army Housing Croom, Maryland Indoor Radon Concentrations

**KEY**  
 Seven-digit Number is Monitor Serial Number  
 [ ] Radon Concentration in pCi/L  
 [NR] Detector Not Returned  
 [ND] No Data For This Location  
 [ ] Field Replicate  
 ( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

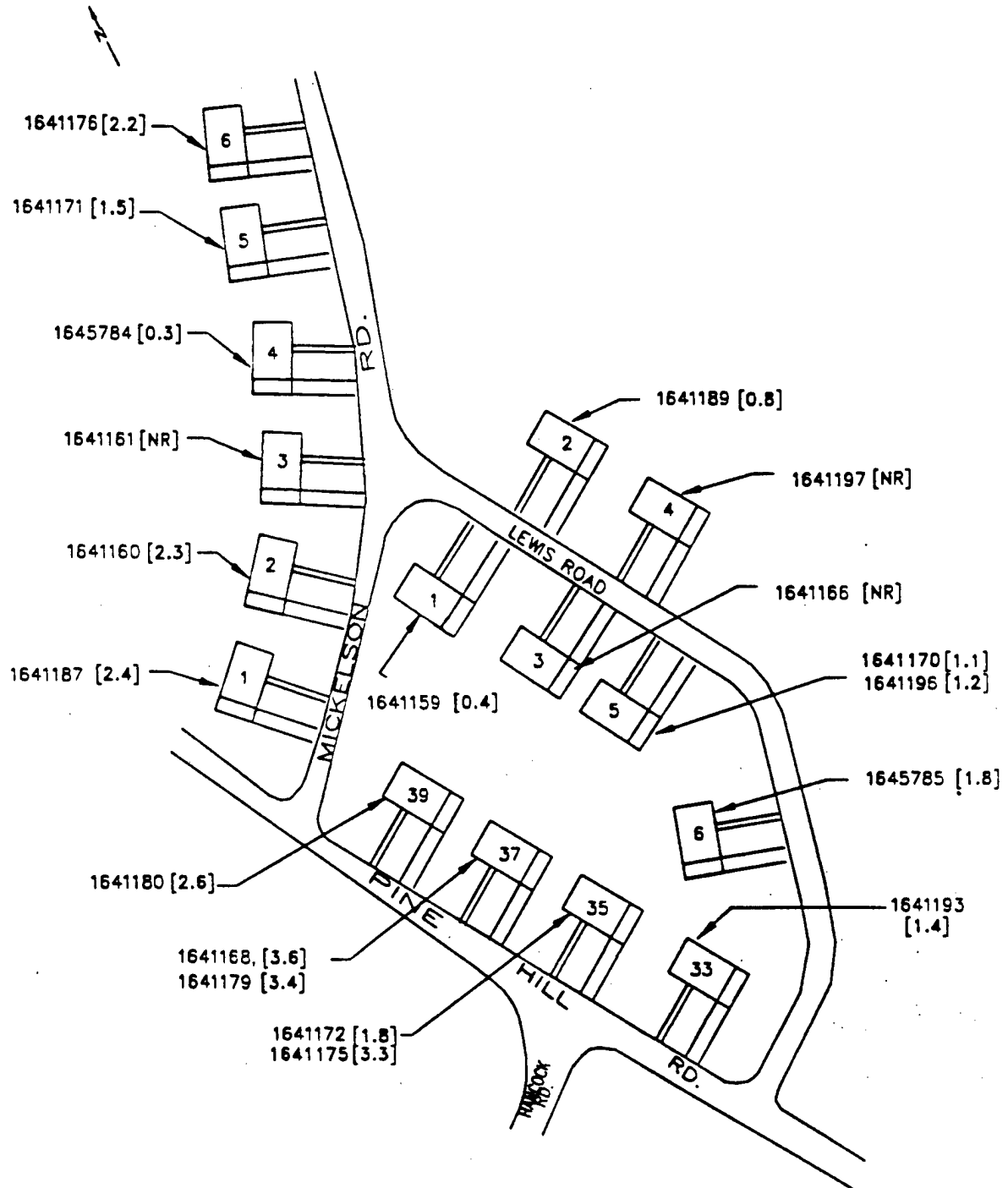
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# Bedford Army Housing Bedford, Massachusetts Indoor Radon Concentrations



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

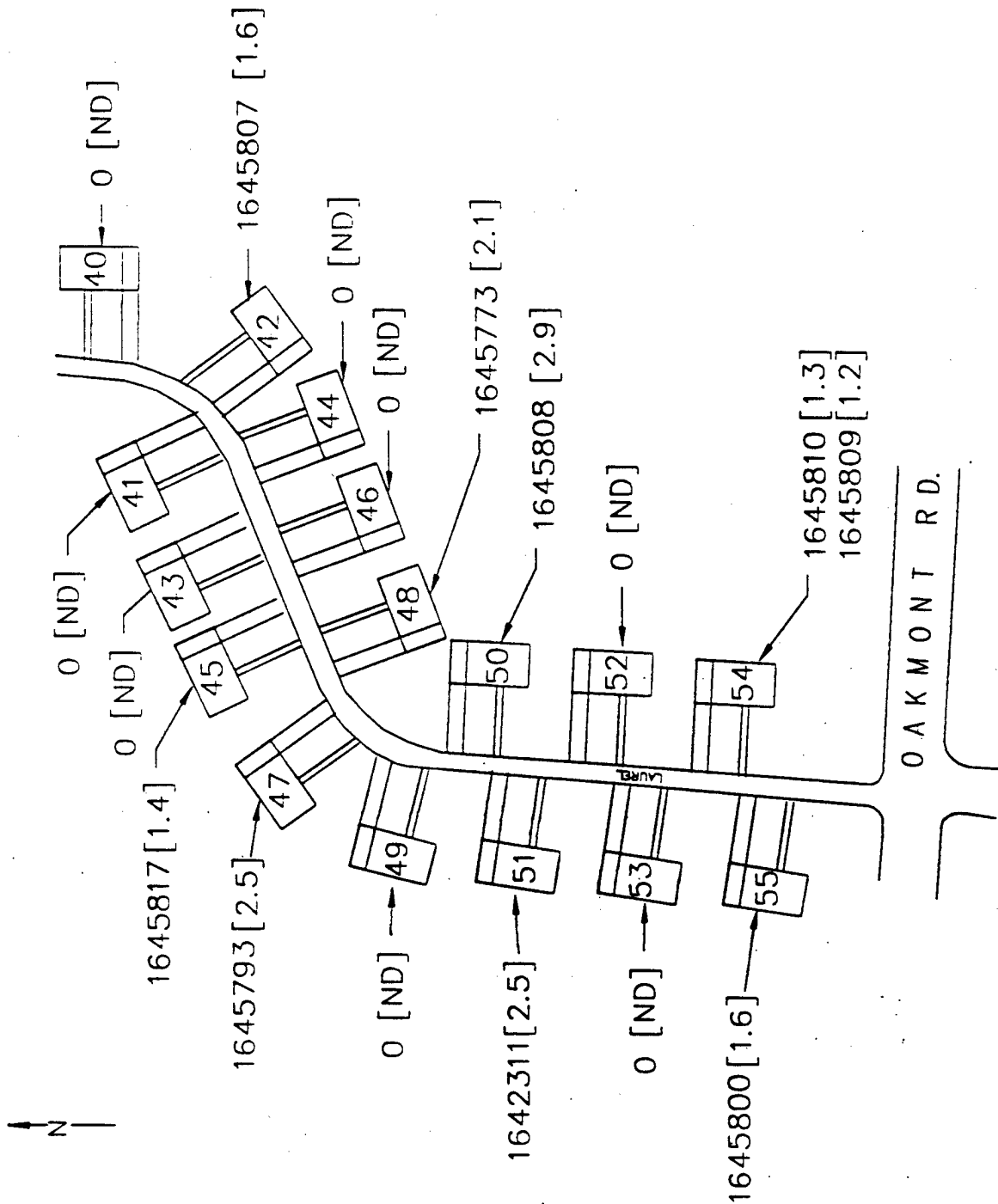
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

**Beverly Army Housing  
Beverly, Massachusetts  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

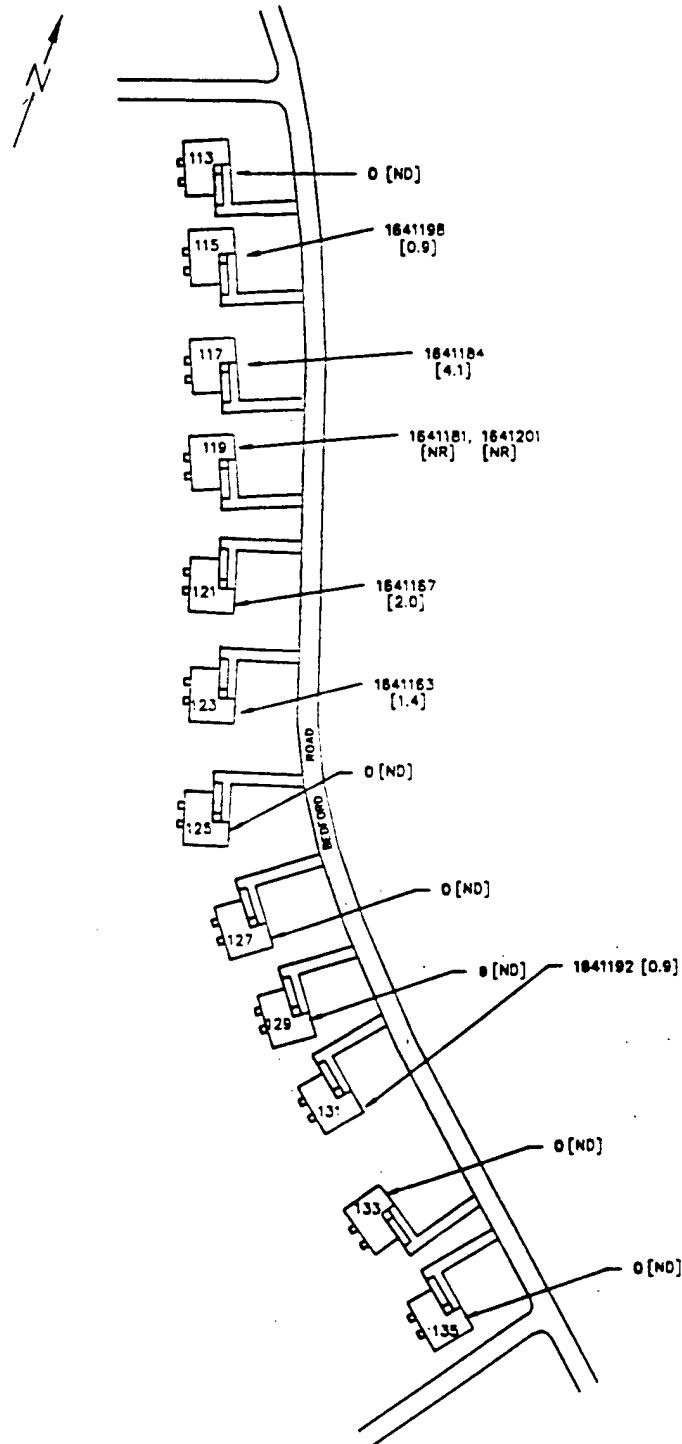
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# Burlington Army Housing Burlington, Massachusetts Indoor Radon Concentrations



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

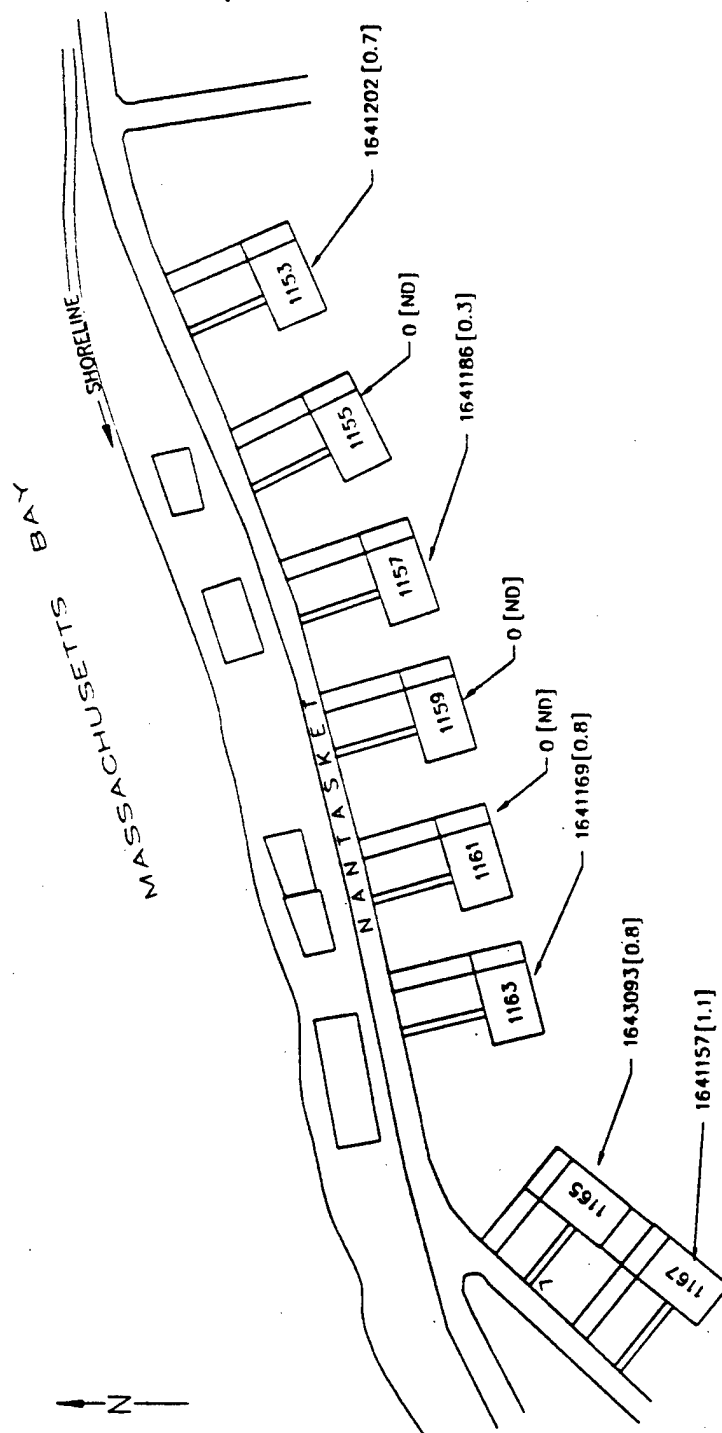
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[ND] No Data For This Location

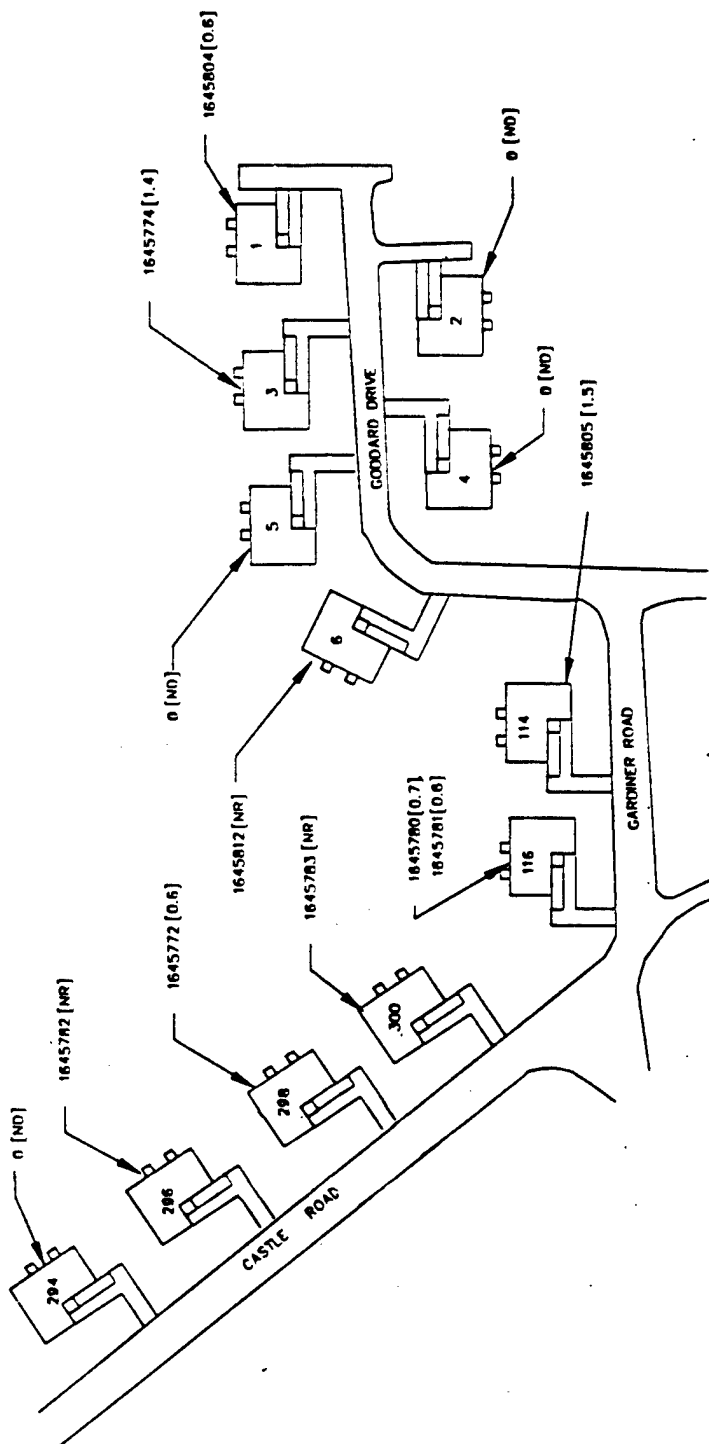
[ ] Field Replicate

( ) Unit or Apartment Number

# Hull Army Housing Hull, Massachusetts Indoor Radon Concentrations



Seven-digit Number is Monitor Serial Number  
☐ Radon Concentration in pCi/L  
☐ Detector Not Returned  
☐ No Data For This Location  
☐ Field Replicate  
☐ Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

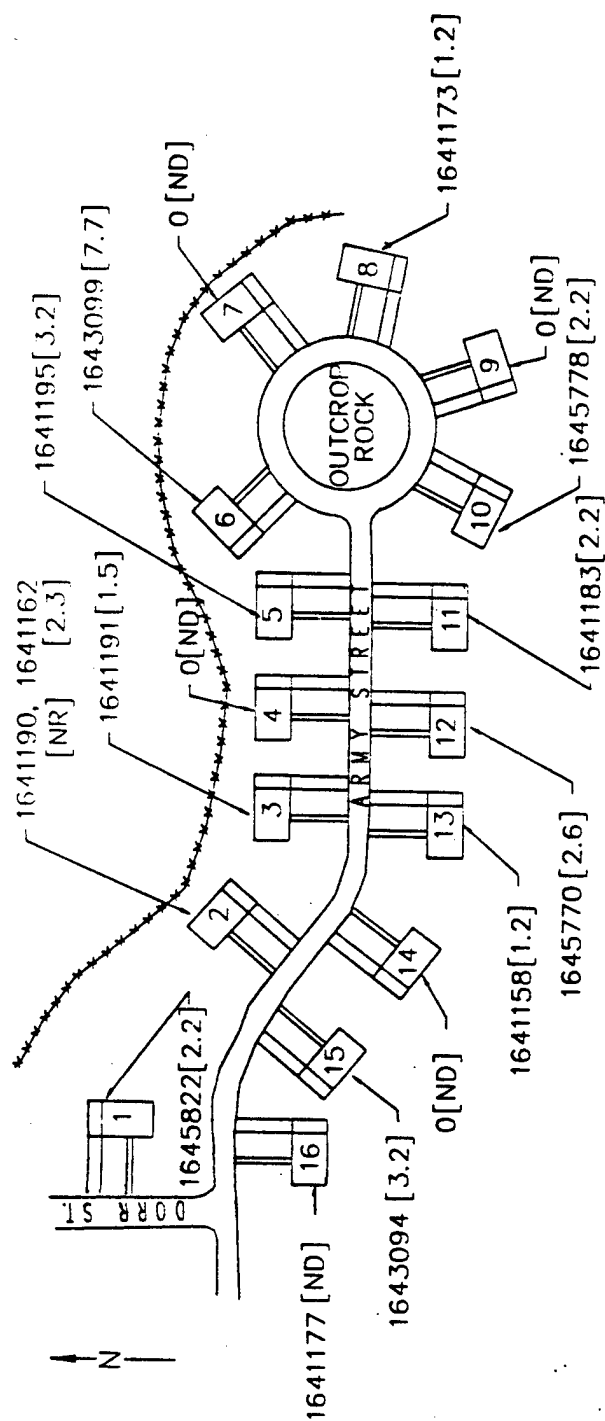
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

**Randolph Army Housing  
Randolph, Massachusetts  
Indoor Radon Concentrations**



## KEY

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

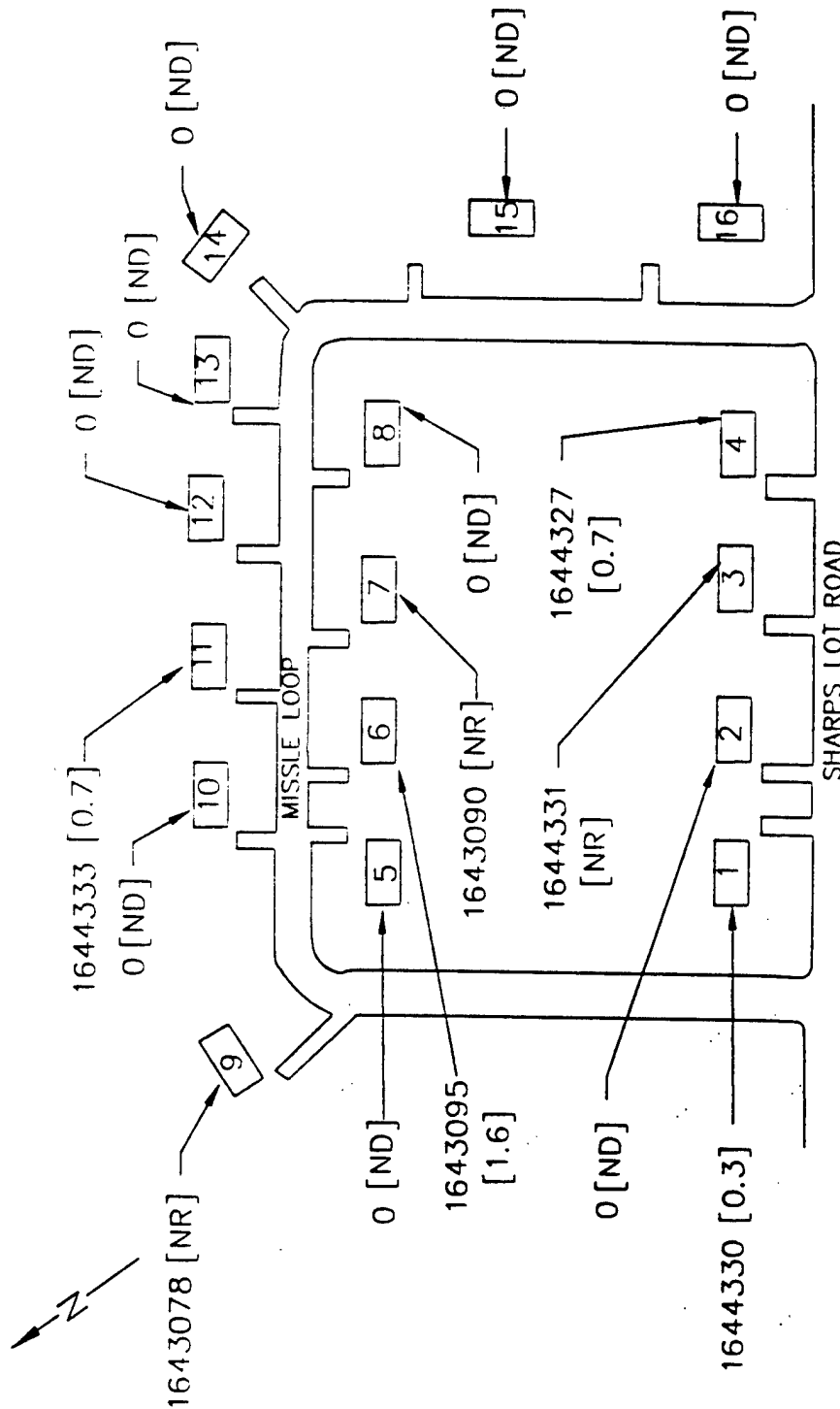
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

# Swansea Army Housing Swansea, Massachusetts Indoor Radon Concentrations



## KEY

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

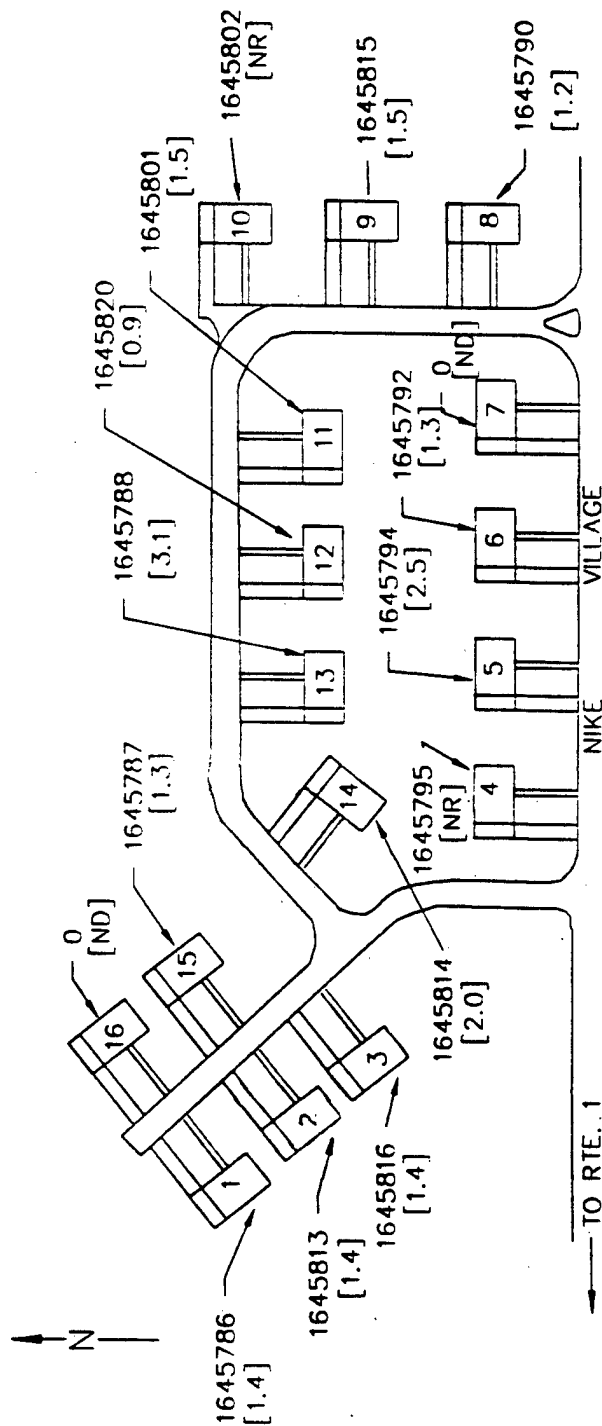
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

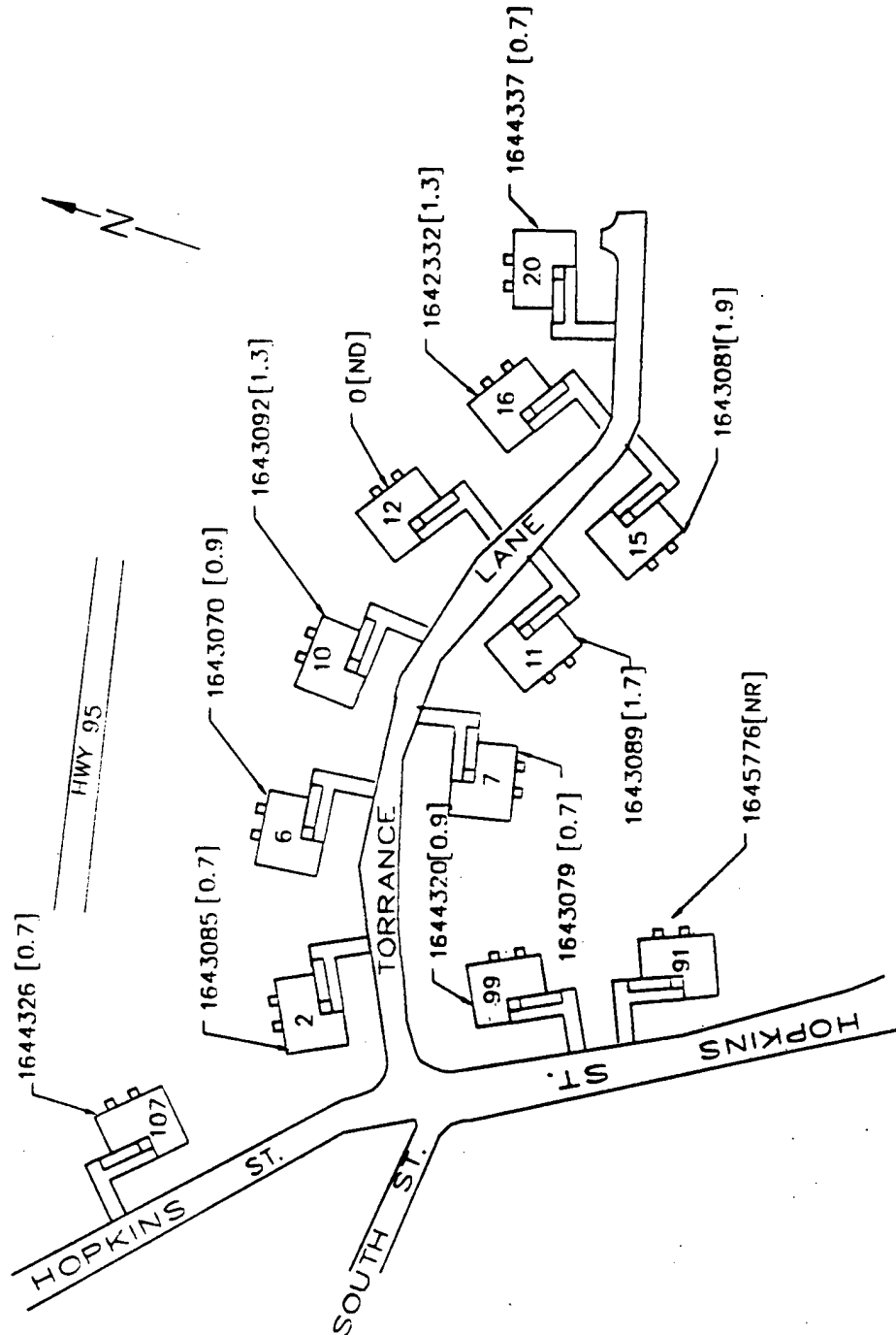
( ) Unit or Apartment Number

**Topsfield Army Housing  
Topsfield, Massachusetts  
Indoor Radon Concentrations**



**Wakefield Army Housing  
Wakefield, Massachusetts  
Indoor Radon Concentrations**

**KEY**  
 Seven-digit Number is Monitor Serial Number  
 [ ] Radon Concentration in pCi/L  
 [NR] Detector Not Returned  
 [ND] No Data For This Location  
 [ ] [ ] Field Replicate  
 ( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

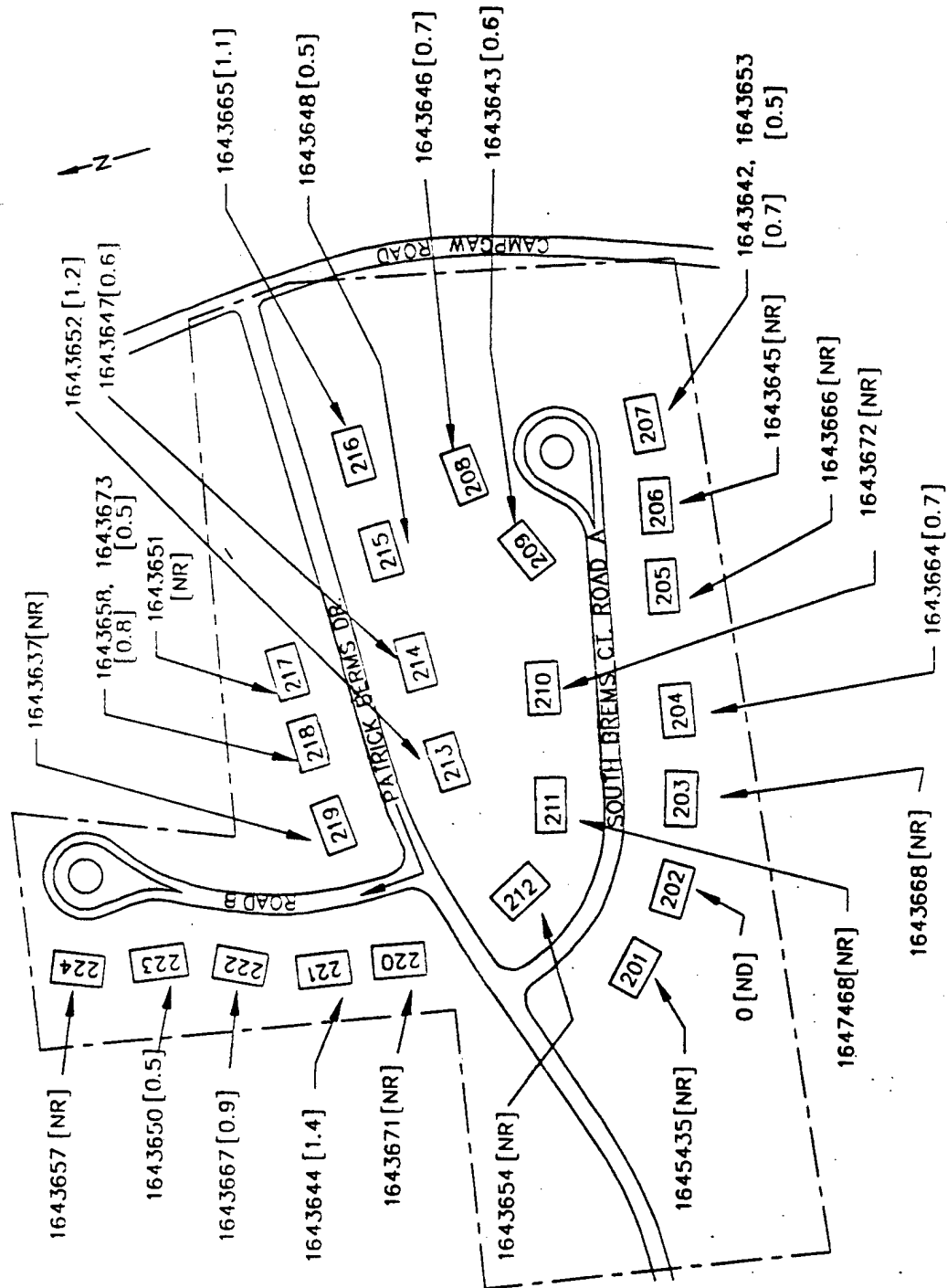
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# Franklin Lakes Army Housing Franklin Lakes, New Jersey Indoor Radon Concentrations



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

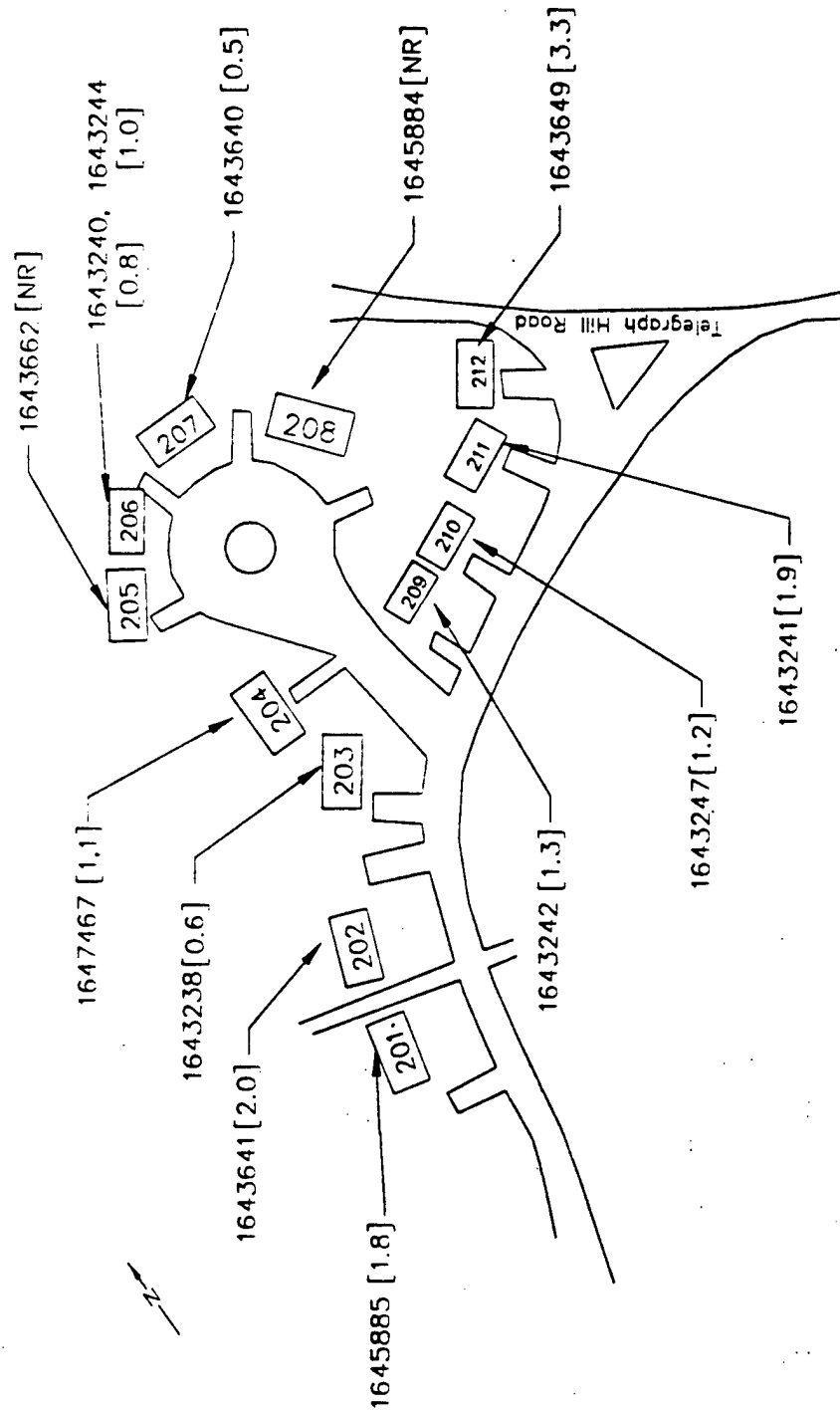
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

# Holmdel Army Housing Holmdel, New Jersey Indoor Radon Concentrations



## Livingston Army Housing East Hanover Twp, New Jersey Indoor Radon Concentrations

## KEY

**Seven-digit Number is Monitor Serial Number**

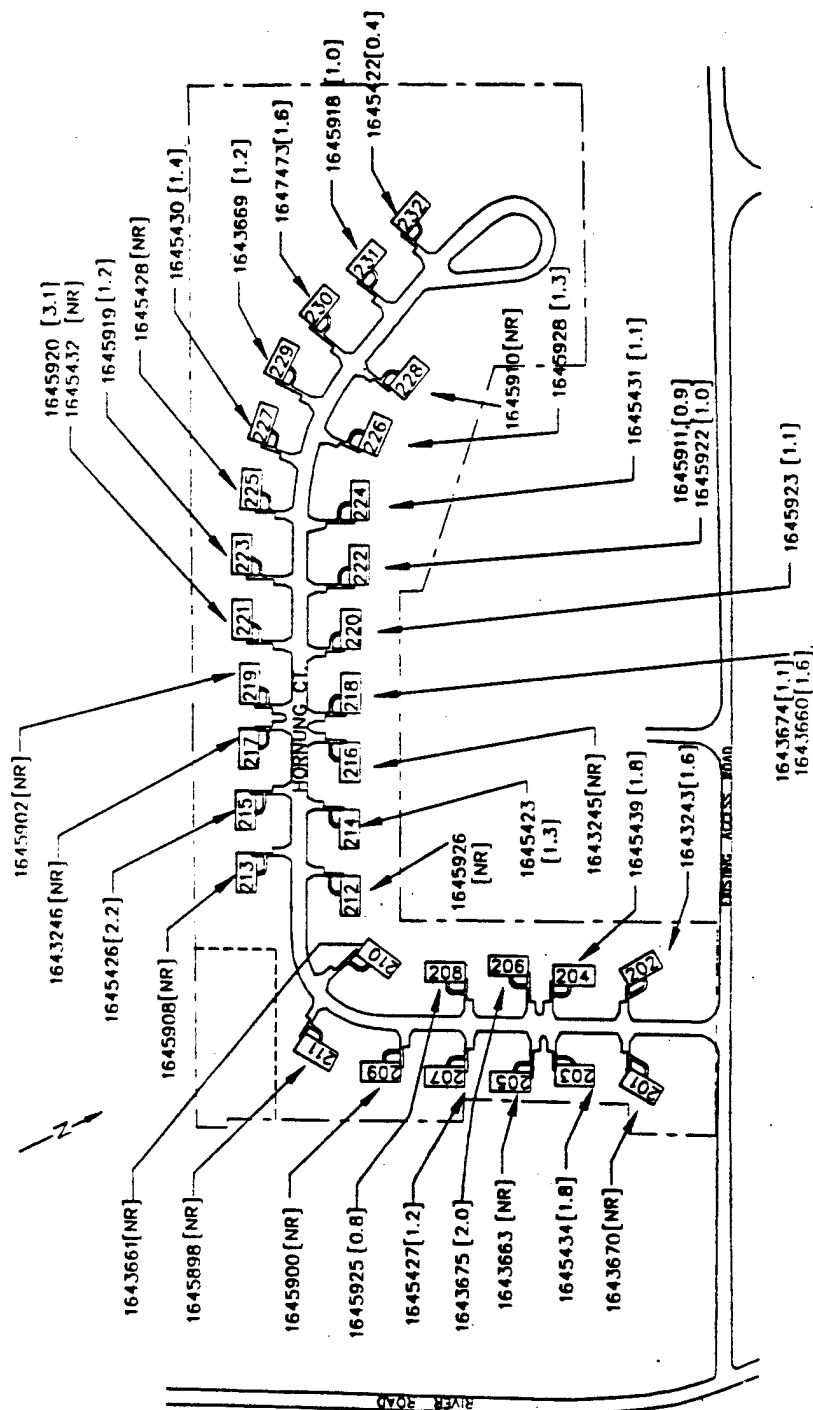
[ ] Radon Concentration in pCi/L

**[NR] Detector Not Returned**

[ND] No Data For This Location

**[ ] [ ] Field Replicate**

( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

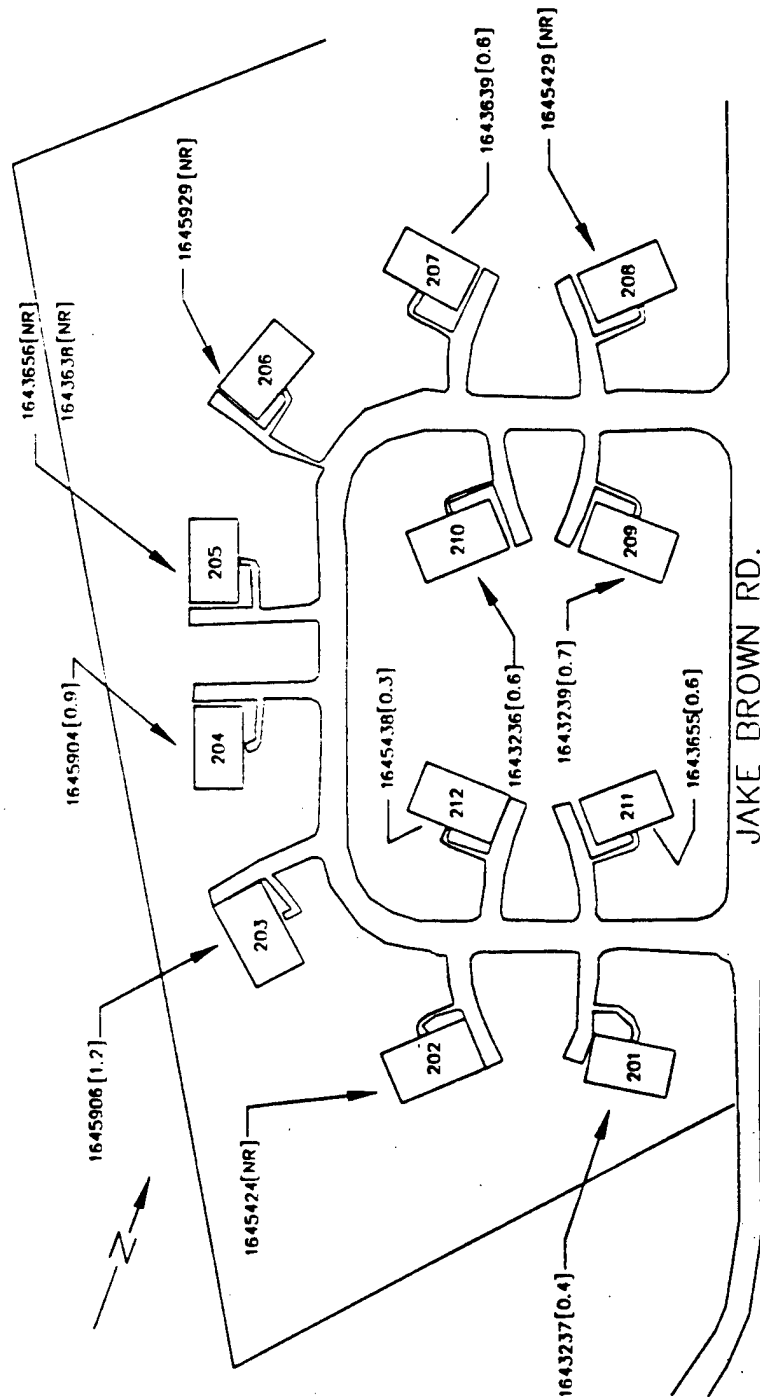
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# Old Bridge Army Housing Old Bridge, New Jersey Indoor Radon Concentrations



## KEY

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

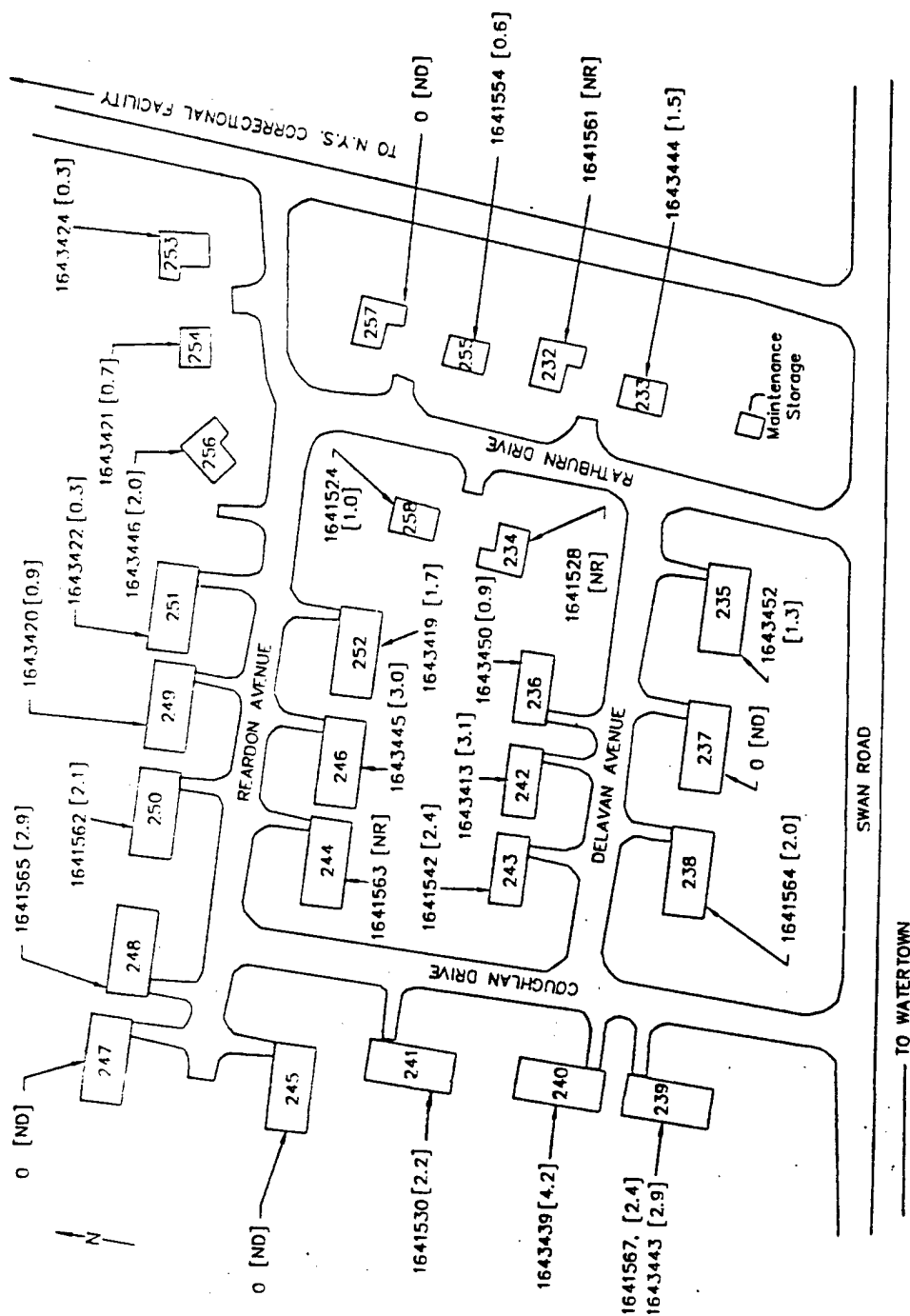
[NR] Detector Not Returned

[ND] No Data For This Location

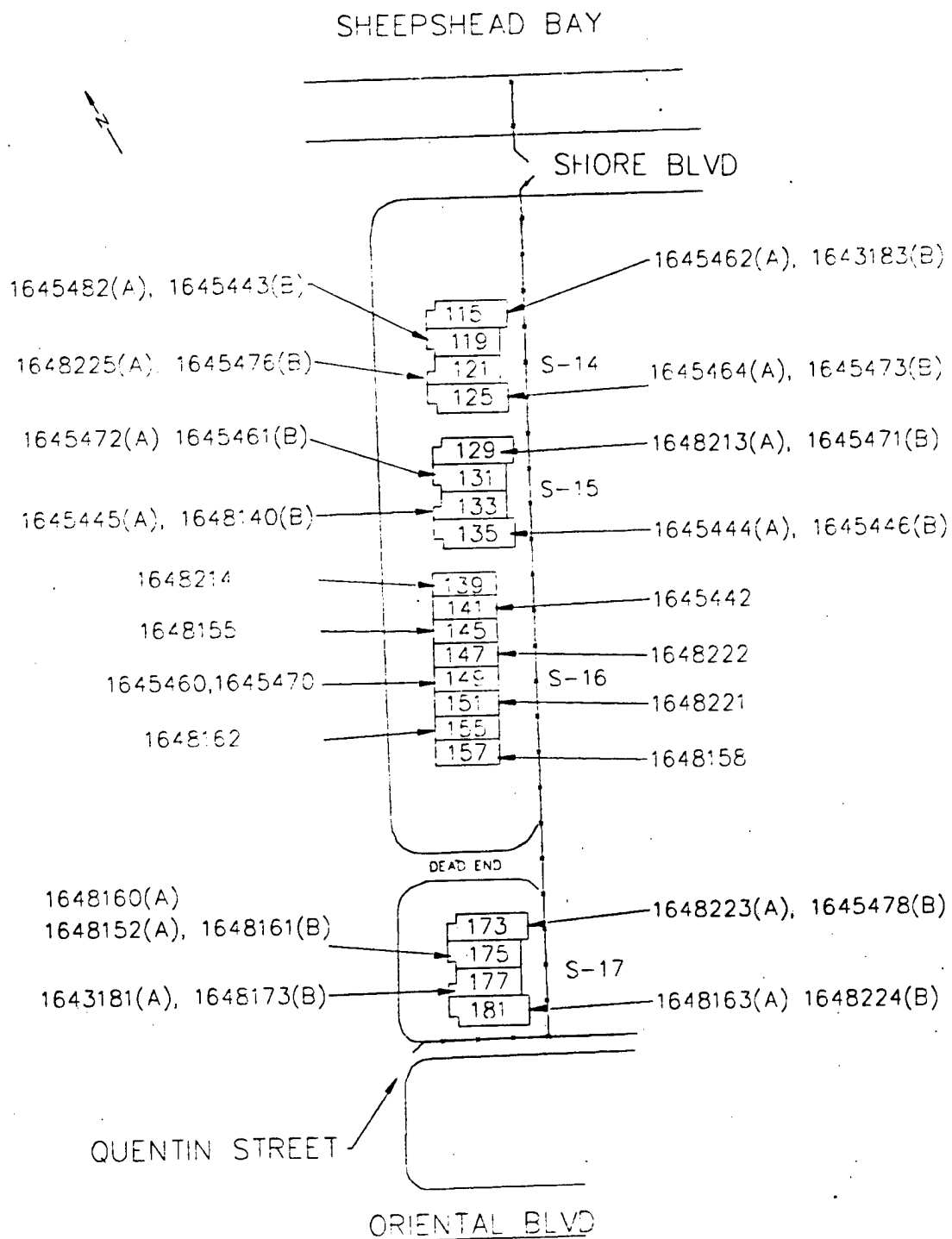
[ ] Field Replicate

( ) Unit or Apartment Number

# Dry Hill Army Housing Watertown, New York Indoor Radon Concentrations



**Manhattan Beach Army Housing  
Brooklyn, New York  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

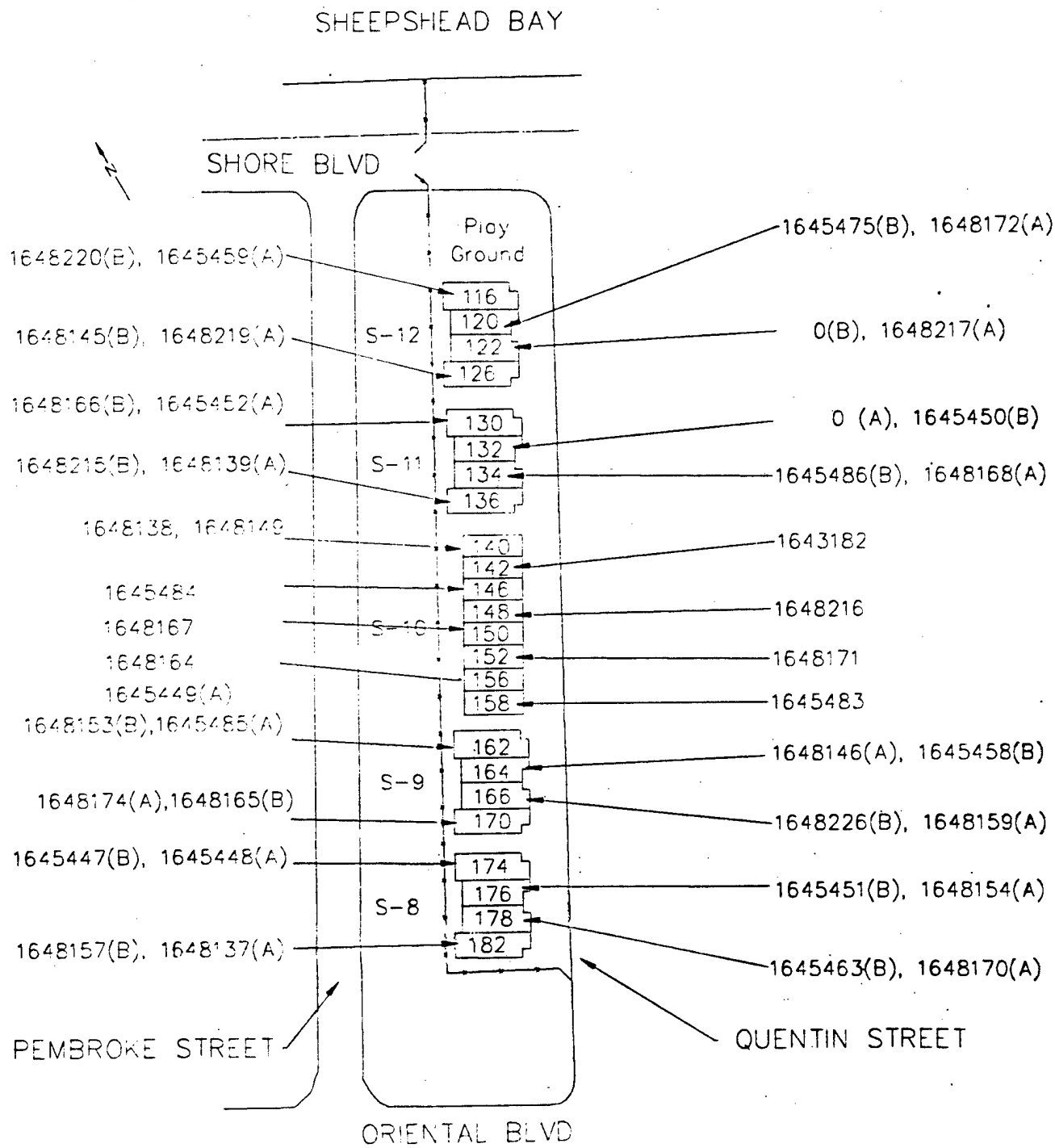
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

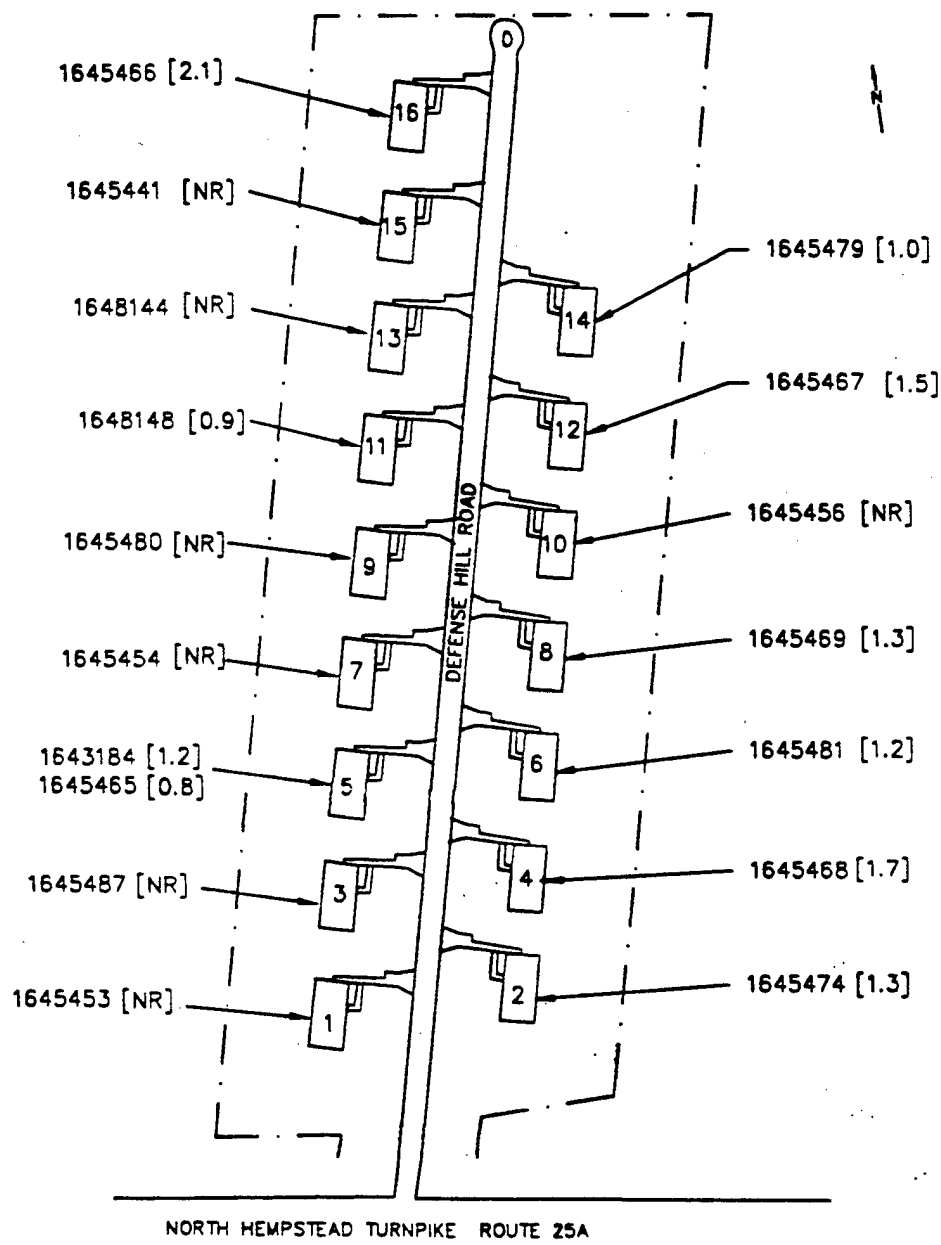
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

**Rocky Point Army Housing**  
**Rocky Point, New York**  
**Indoor Radon Concentrations**



# Spring Valley Army Housing Ramapo, New York Indoor Radon Concentrations

**KEY**

Seven-digit Number is Monitor Serial Number

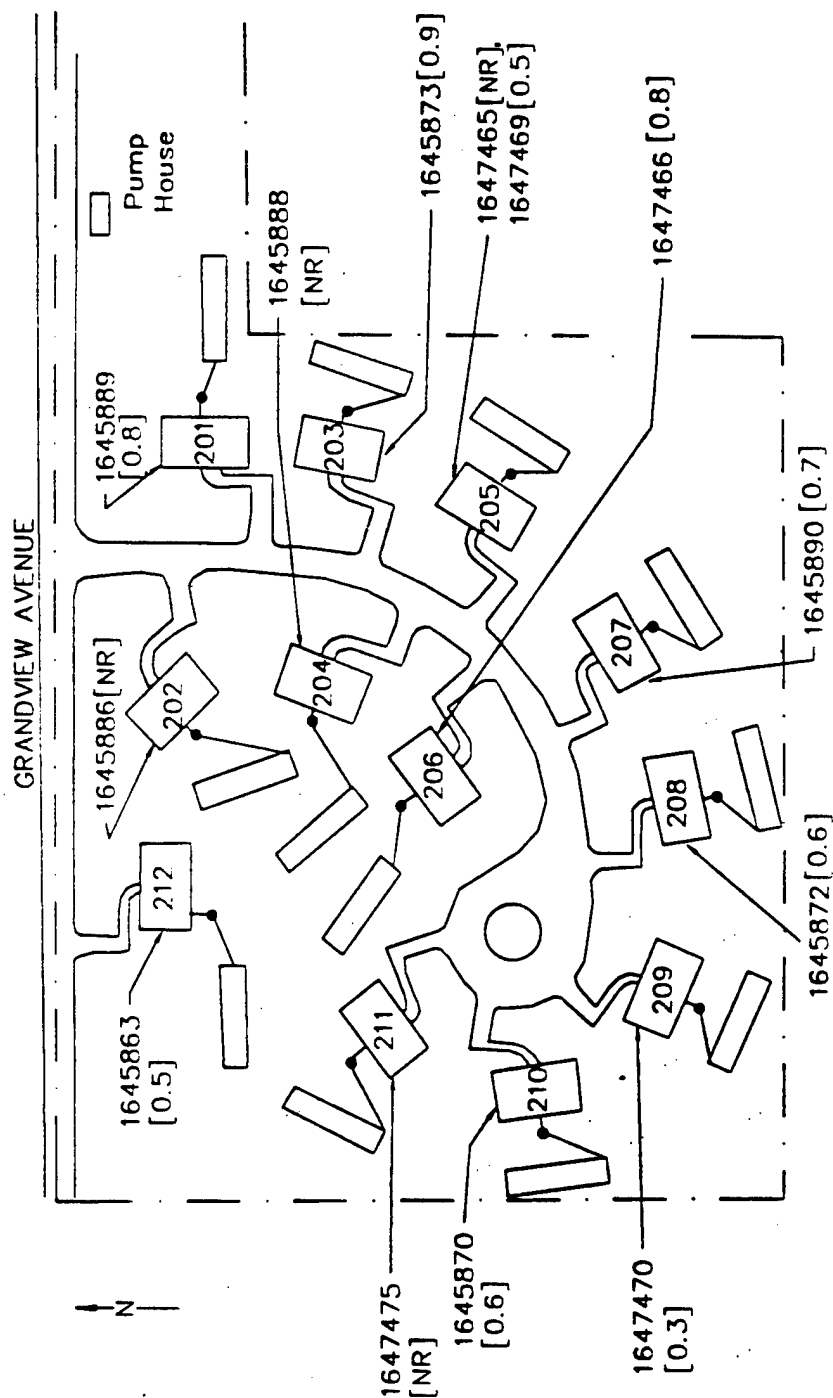
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

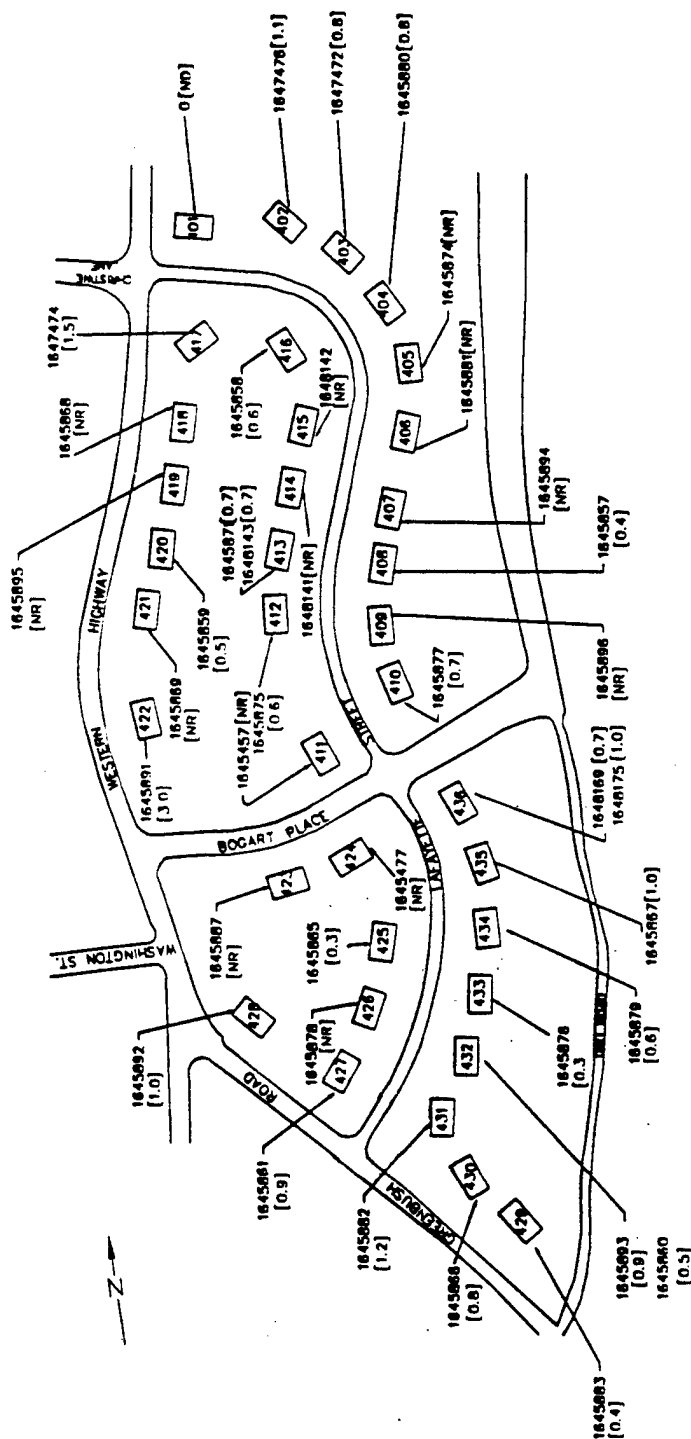
[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number



( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

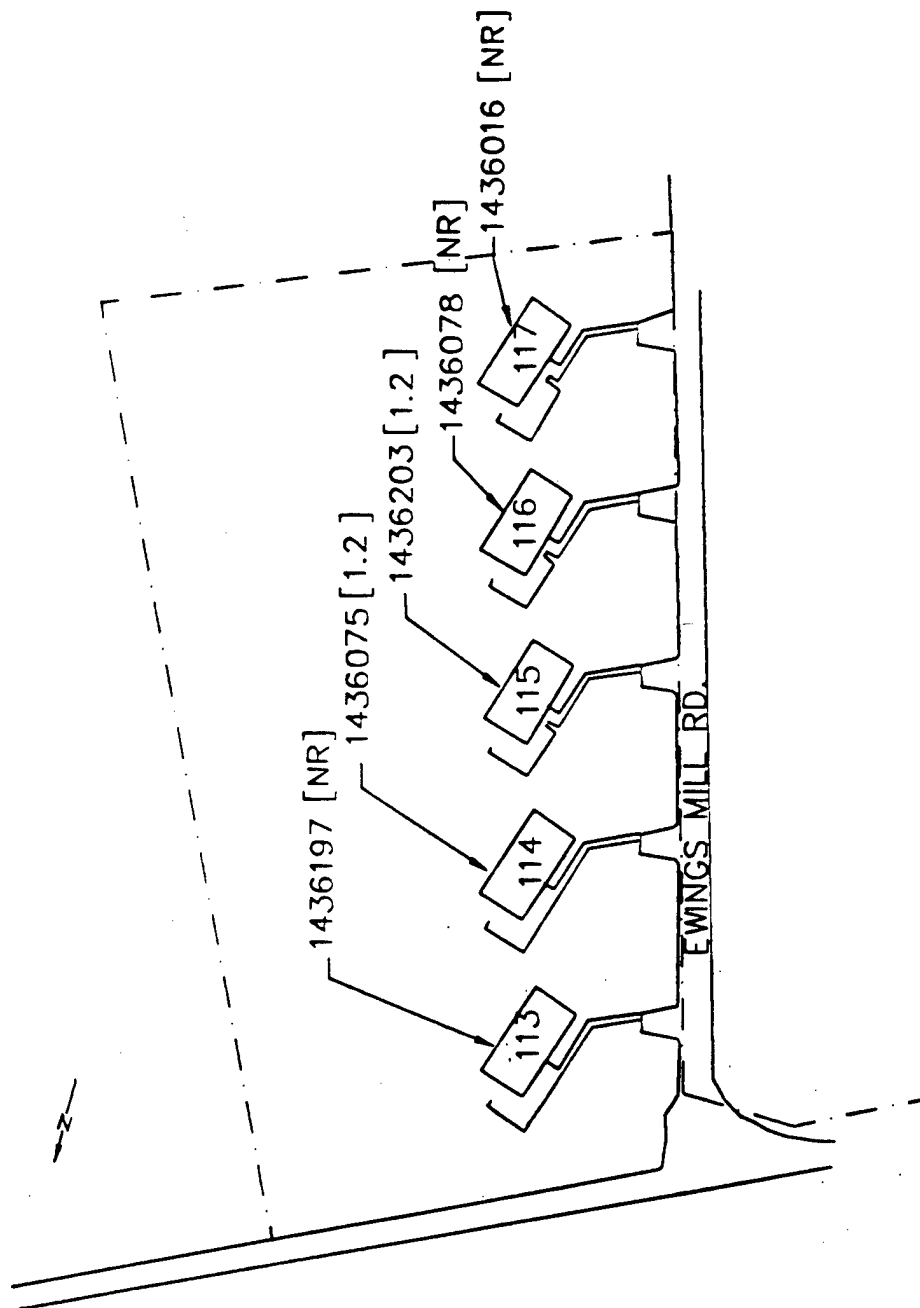
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

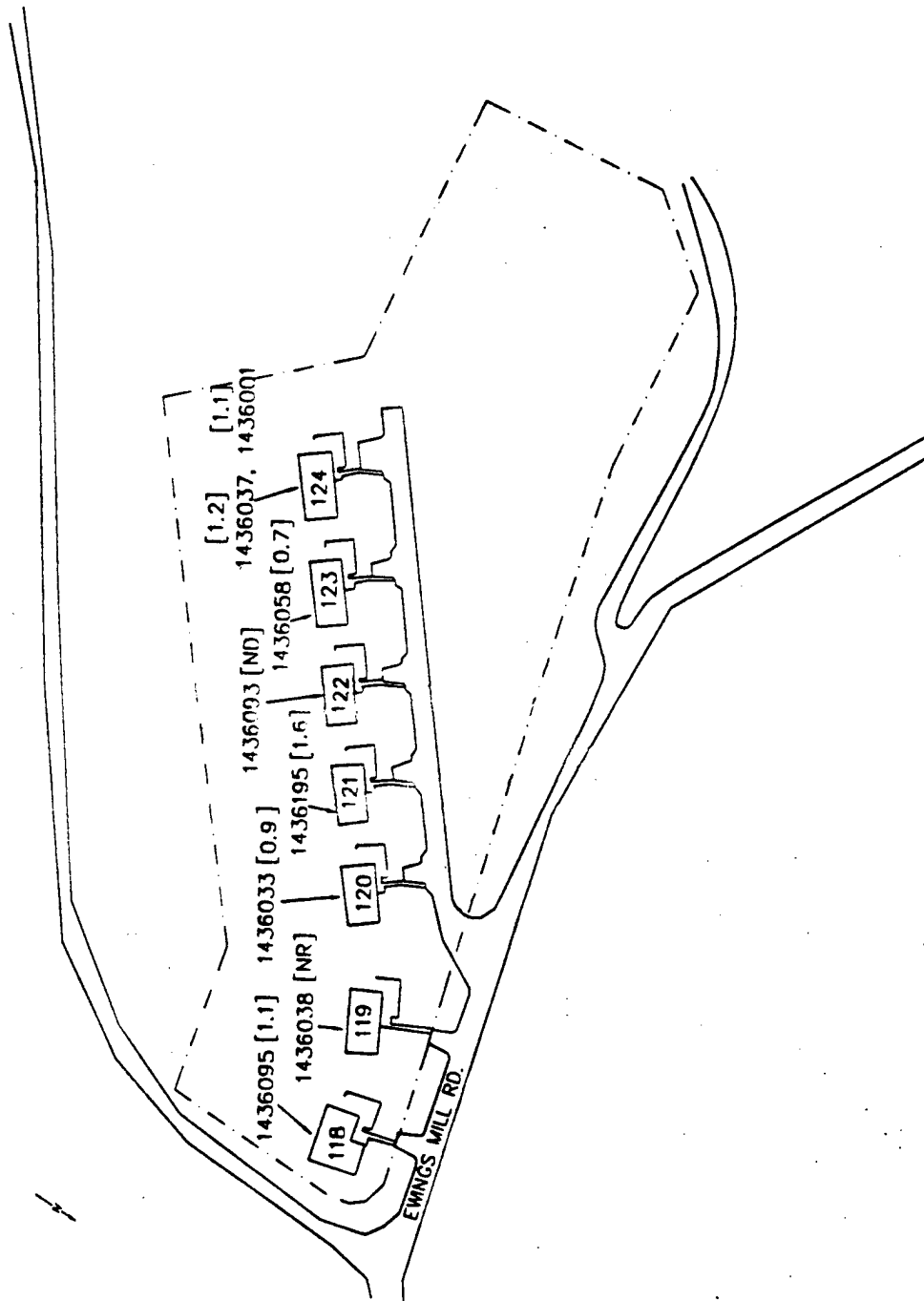
**Coraopolis 71C Army Housing  
Robinson Twp, Pennsylvania  
Indoor Radon Concentrations**

**KEY**

Seven-digit Number is Monitor Serial Number

- [ ] Radon Concentration in pCi/L
- [NR] Detector Not Returned
- [ND] No Data For This Location
- [ ] Field Replicate
- ( ) Unit or Apartment Number

**Coraopolis 71L Army Housing  
Moon Twp, Pennsylvania  
Indoor Radon Concentrations**



**Seven-digit Number is Monitor Serial Number**

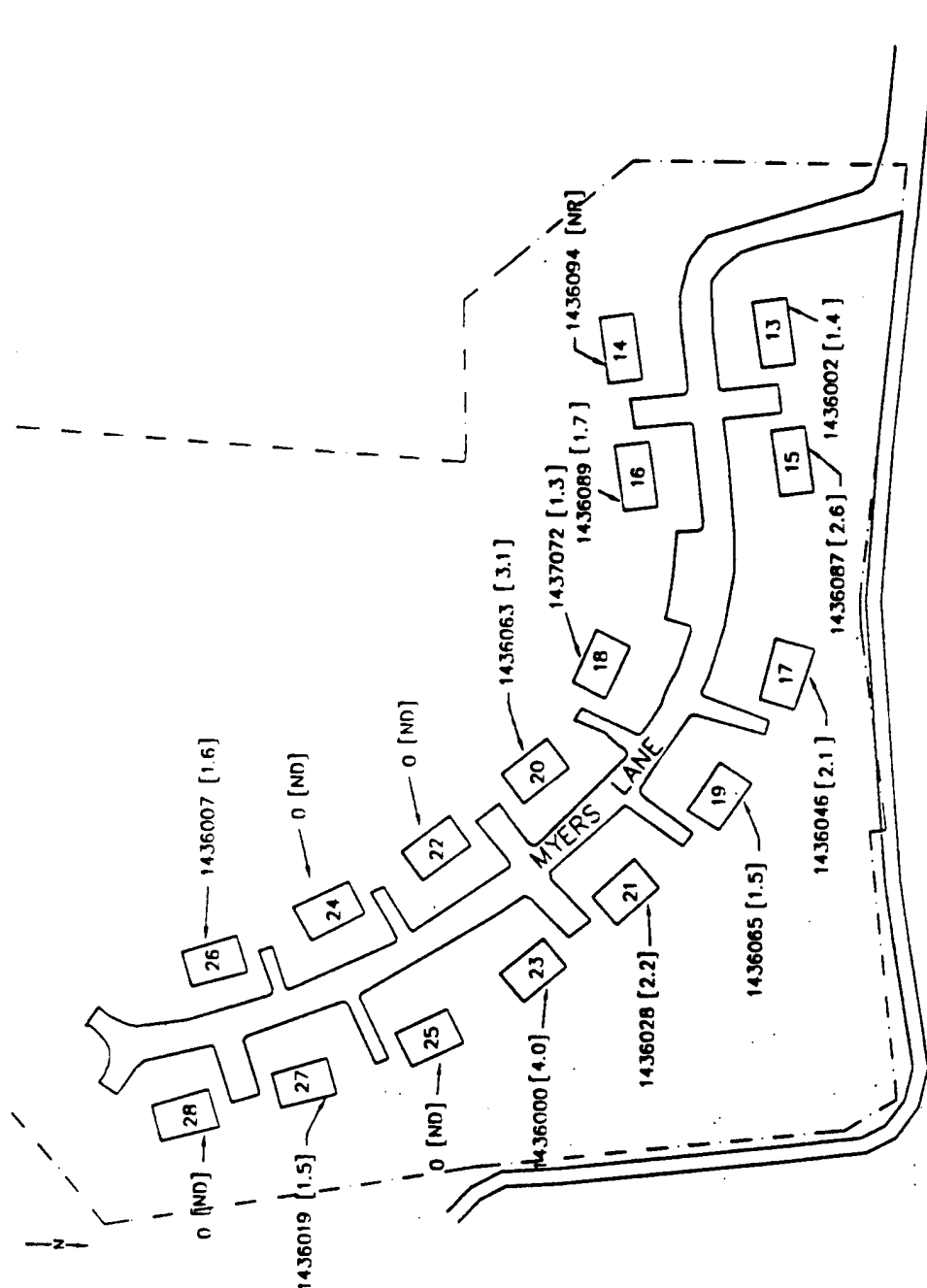
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

[ND] No Data For This Location

☐ ☐ Field Replicate

( ) Unit or Apartment Number



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

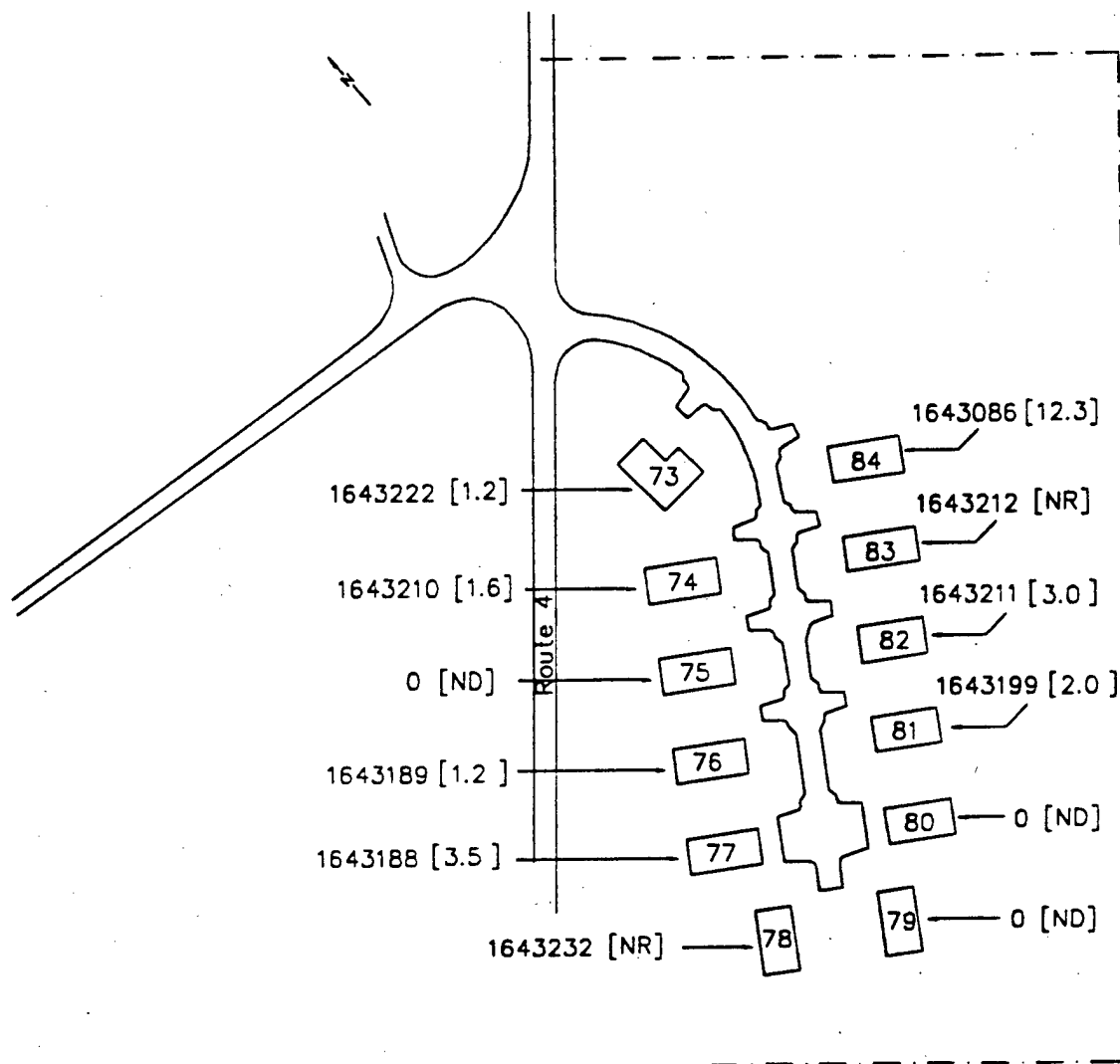
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

**Elizabeth Army Housing  
Elizabeth, Pennsylvania  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

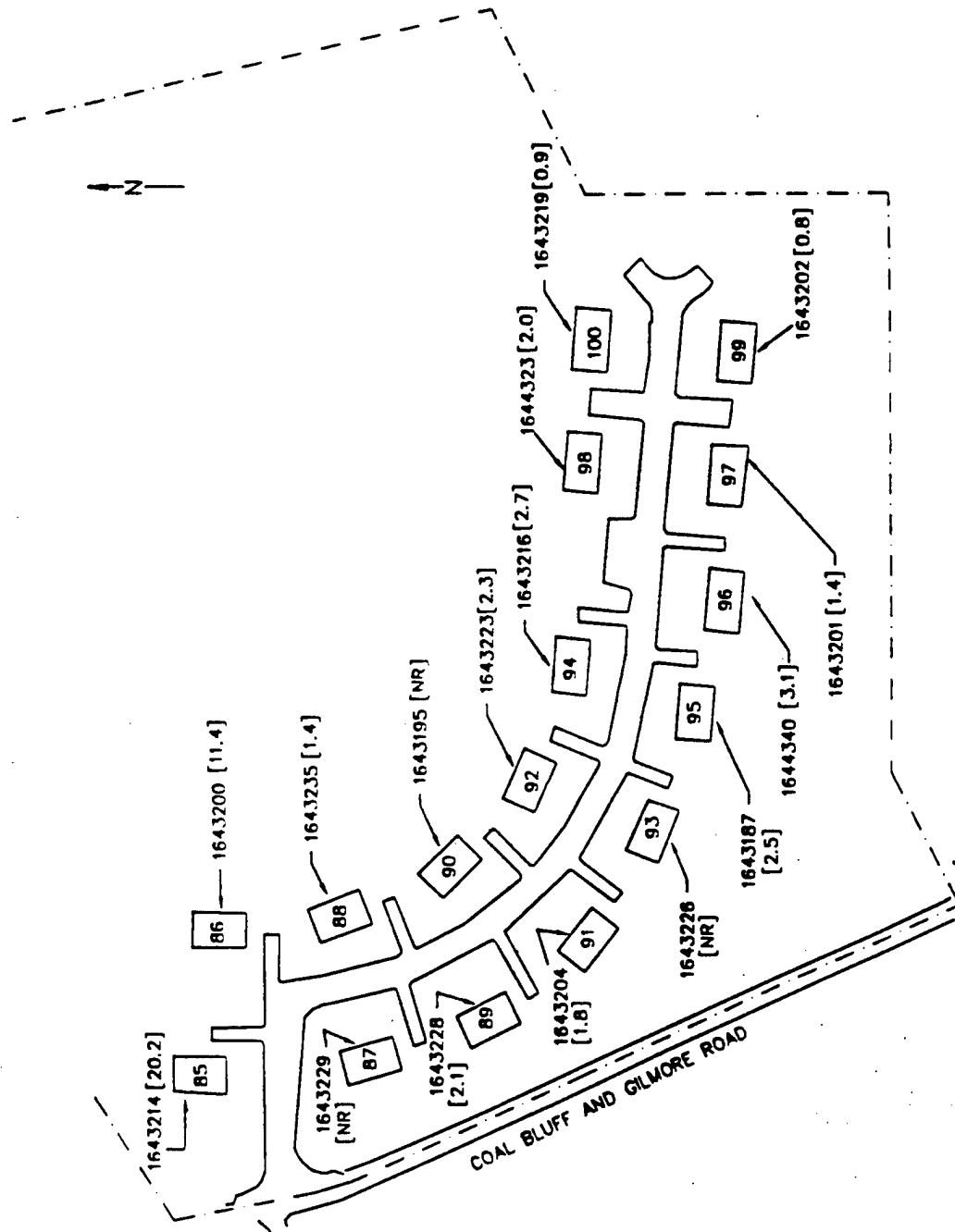
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

**Elrama Army Housing  
Elrama, Pennsylvania  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

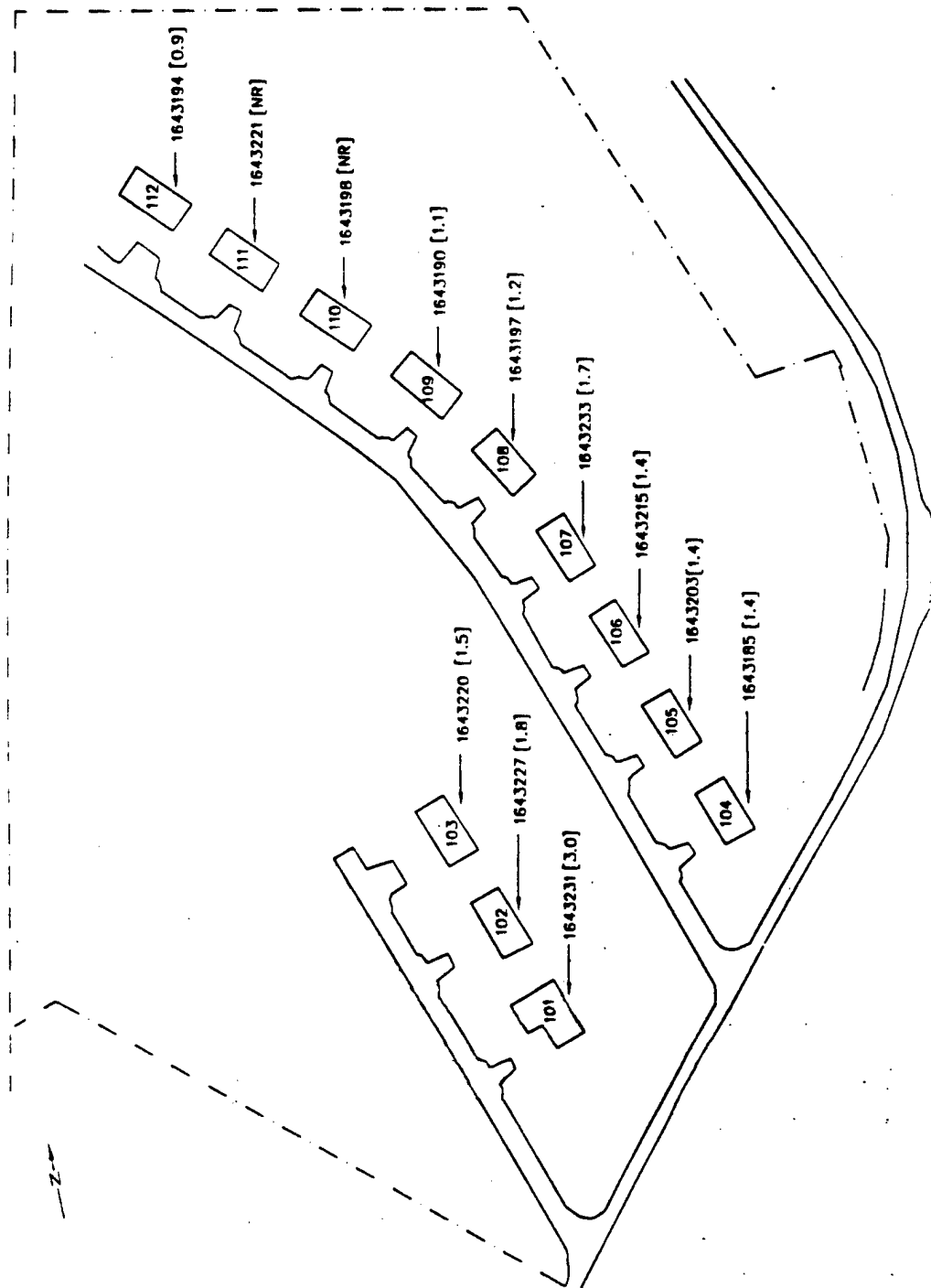
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# **Finleyville Army Housing Finleyville, Pennsylvania Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

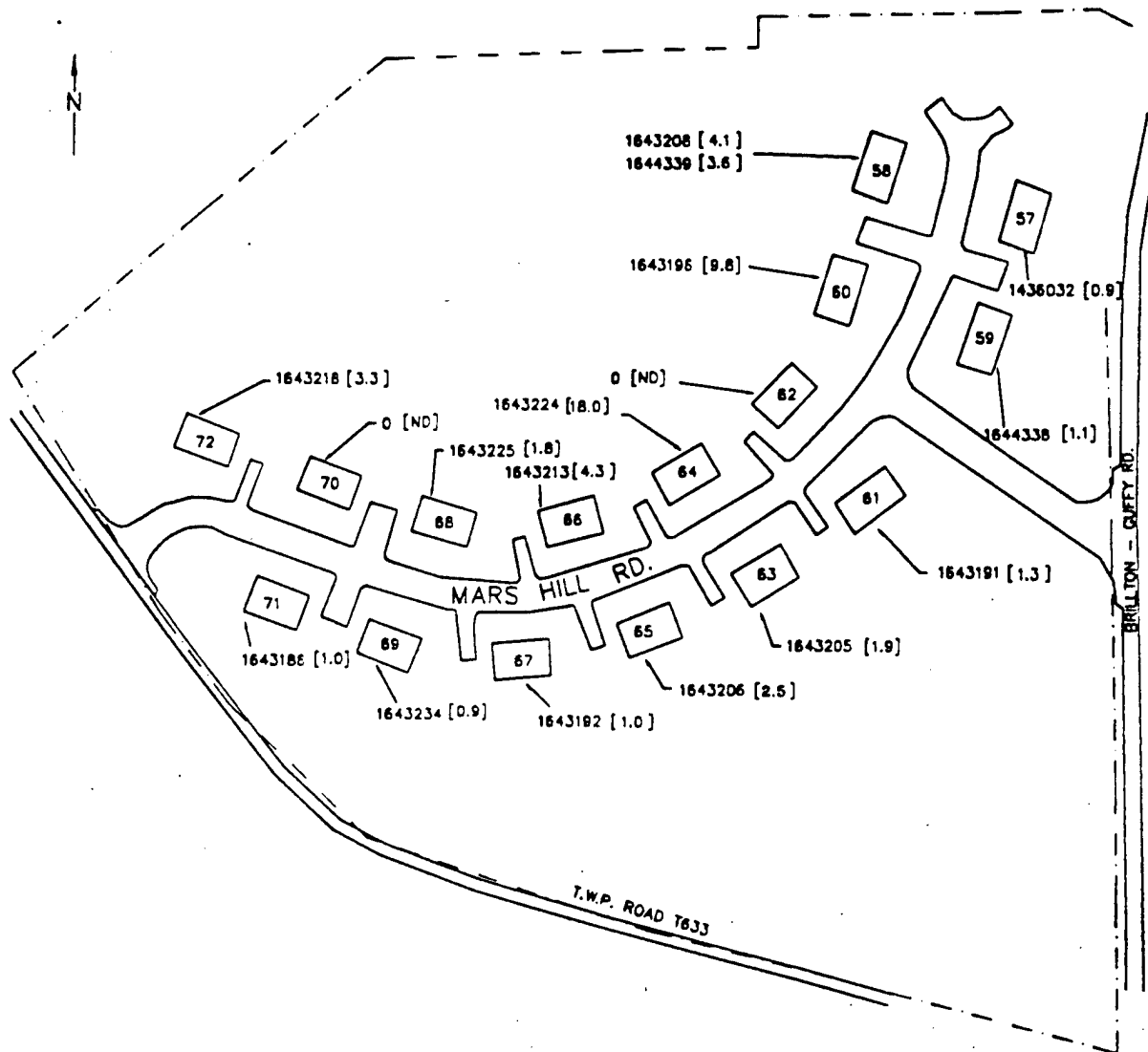
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

# Herminie Army Housing Herminie, Pennsylvania Indoor Radon Concentrations



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

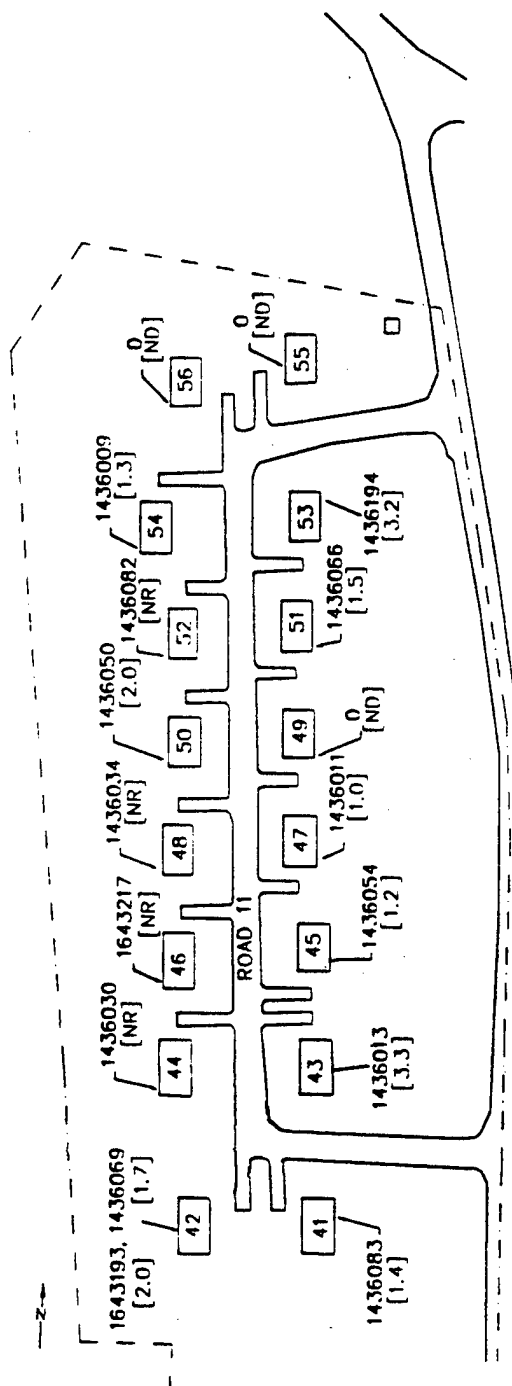
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

**Irwin Army Housing  
Irwin, Pennsylvania  
Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

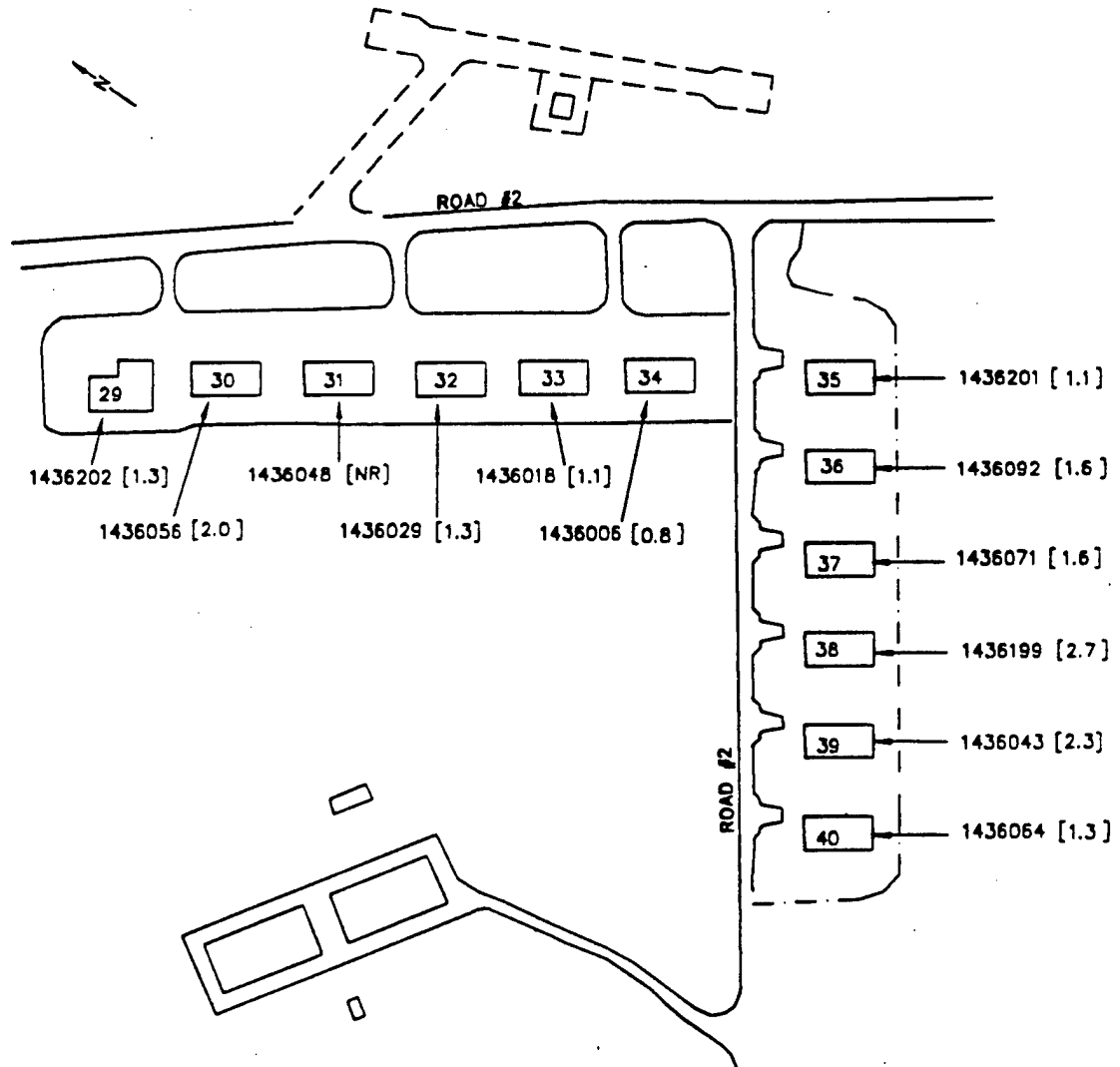
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

( ) Unit or Apartment Number

**Monroeville Army Housing  
Monroeville, Pennsylvania  
Indoor Radon Concentrations**


**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

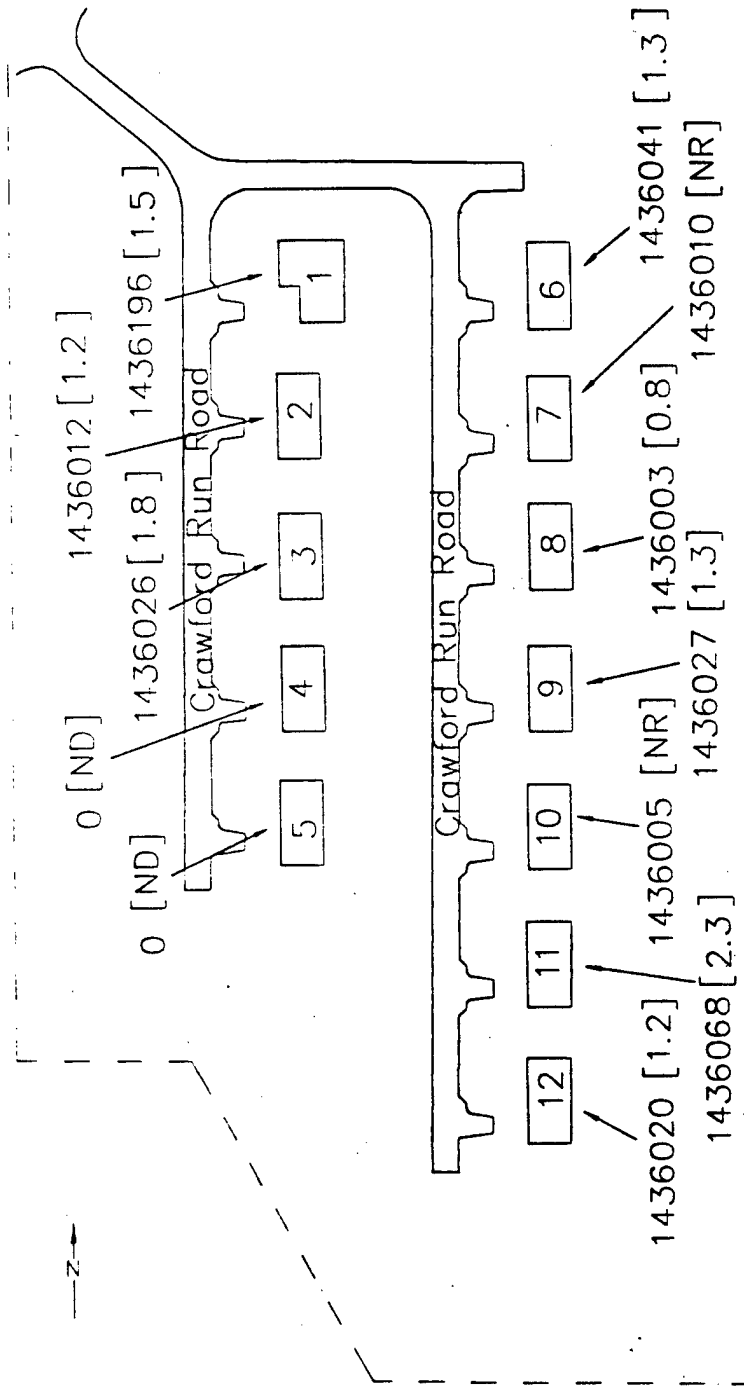
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

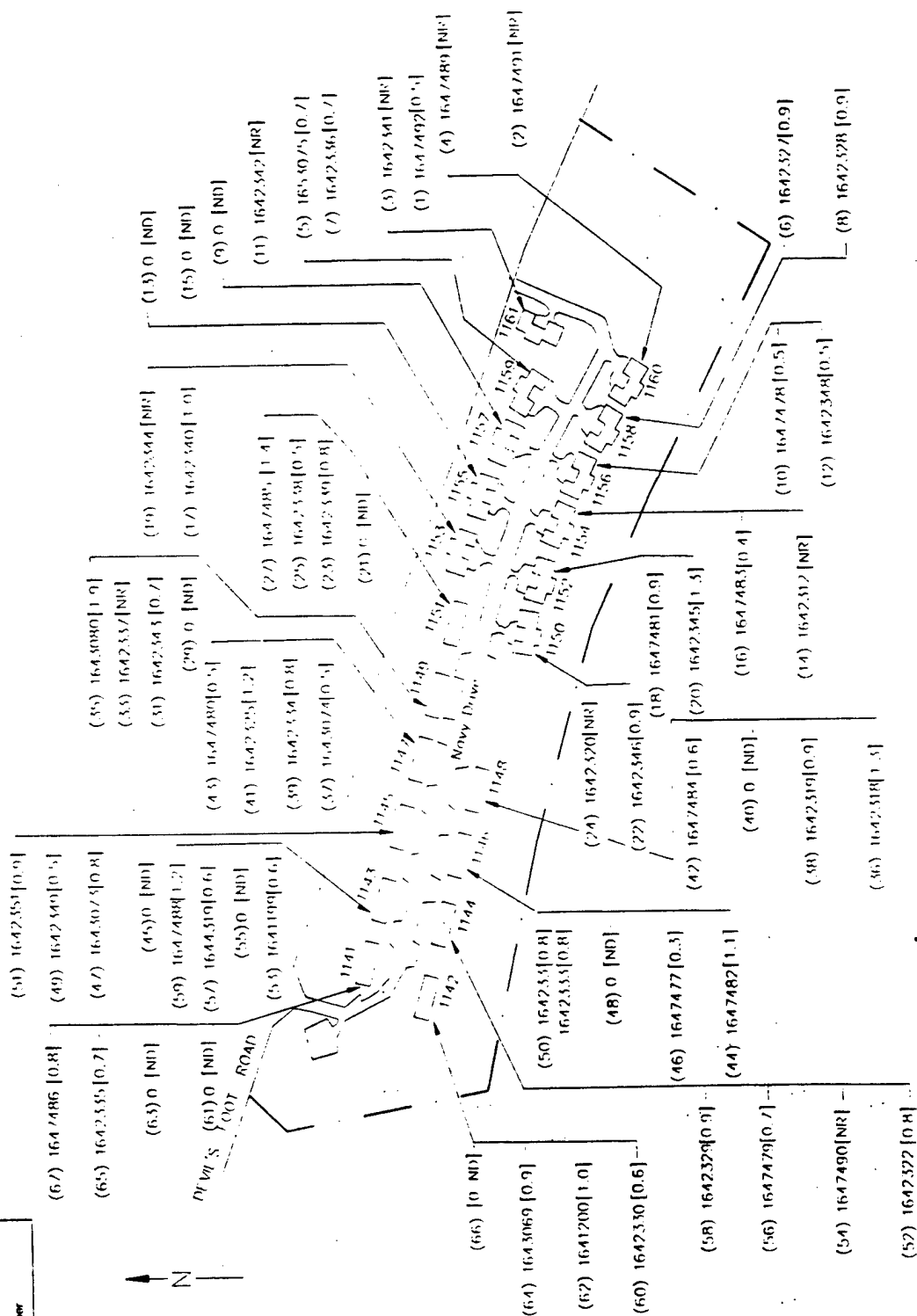
**Rural Ridge Army Housing  
Rural Ridge, Pennsylvania  
Indoor Radon Concentrations**



Davisville Army Housing  
North Kingston, Rhode Island  
Indoor Radon Concentrations

I-46

KEY  
Seven digit number is Monitor Serial Number  
| Radon Concentration in pCi/L  
[NR] Detector Not Returned  
[ND] No Data For This Location  
|| Field Duplicate  
( ) Unit or Apartment Number



## **Appendix J**

### **Variances in Replicate Detector Pair Results**



**Appendix J:**  
**Variances in Replicate Detector Pair Results<sup>a</sup>**

Property	Detector	Exposure [(pCi/L) days]	Percent Deviation from Mean (for pair)
Ansonia, Conn.	1648257 1648251	1064.7 2016.6	30.9
East Windsor, Conn.	1646442 1645763	38.2 30.0	12.0
Fairfield, Conn.	1644201 1644208	231.7 198.2	7.8
Fairfield, Conn.	1646475 1646494	152.2 152.2	0.0
Manchester, Conn.	1646434 1646451	43.5 61.0	16.7
Middletown, Conn.	1645758 1644254	30.0 43.5	18.4
Milford, Conn.	1644210 1646491	96.1 78.5	10.1
Milford, Conn.	1648233 1648265	99.6 108.3	4.2
New Britain, Conn.	1641540 1641523	207.5 188.9	4.7
Orange, Conn.	1648280 1648279	NR <sup>b</sup> NR	
Orange, Conn.	1646422 1646423	200.1 199.5	0.2
Orange, Conn.	1648284 1646447	114.3 115.4	0.5
Orange, Conn.	1648282 1646480	66.3 103.1	. <sup>c</sup>
Plainville, Conn.	1643438 1643456	NR NR	
Plainville, Conn.	1641525 1641526	87.3 40.0	37.2

Property	Detector	Exposure [(pCi/L) days]	Percent Deviation from Mean (for pair)
Plainville, Conn.	1641536	NR	
	1641522	NR	
Plainville, Conn.	1641545	127.4	5.7
	1641513	113.6	
Portland, Conn.	1644222	73.3	3.8
	1644224	68.0	
Shelton, Conn.	1646471	649.4	11.3
	1648231	517.6	
Westport, Conn.	1646481	576.3	7.5
	1644204	495.6	
Addison, Ill.	1644027	593.8	3.4
	1644003	635.9	
Worth, Ill.	1647030	204.7	4.9
	1647031	185.5	
Croom, Md.	1643685	NR	
	1643677	NR	
Bedford, Mass.	1641196	129.3	5.3
	1641170	116.2	
Bedford, Mass.	1641172	205.7	10.1
	1641175	167.9	
Bedford, Mass.	1641168	418.5	5.3
	1641179	376.5	
Beverly, Mass.	1645810	129.4	2.1
	1645809	124.1	
Burlington, Mass.	1641181	NR	
	1641201	NR	
Nahant, Mass.	1645781	55.8	8.6
	1645780	66.3	
Randolph, Mass.	1641190	NR	
	1641162	313.4	
East Hanover, N.J.	1643674	157.2	18.8
	1643660	229.9	
East Hanover, N.J.	1645432	NR	
	1645920	302.9	

Property	Detector	Exposure [(pCi/L) days]	Percent Deviation from Mean (for pair)
East Hanover, N.J.	1645922	120.6	5.1
	1645911	108.8	
Franklin Lakes, N.J.	1643658	104.8	23.8
	1643673	64.5	
Franklin Lakes, N.J.	1643642	64.5	14.6
	1643653	48.8	
Holmdel, N.J.	1643240	75.2	15.6
	1643244	103.1	
Old Bridge, N.J.	1643638	NR	
	1643656	NR	
Brooklyn, N.Y.	1648138	47.3	22.4
	1648149	30.0	
Brooklyn, N.Y.	1645485	NR	
	1645449	NR	
Brooklyn, N.Y.	1645470	NR	
	1645460	NR	
Brooklyn, N.Y.	1648152	NR	
	1648160	NR	
Rocky Point, N.Y.	1643184	108.3	19.3
	1645465	73.3	
Spring Valley, N.Y.	1647465	NR	
	1647469	47.0	
Tappan, N.Y.	1645871	82.1	4.1
	1648143	89.1	
Tappan, N.Y.	1645893	86.4	21.5
	1645860	55.8	
Tappan, N.Y.	1648169	62.8	21.8
	1648175	97.8	
Watertown, N.Y.	1641567	94.3	9.3
	1643443	113.6	
Coraopolis, Penn. (Robinson Twp.)	1436037	120.8	4.8
	1436001	109.8	
Herminie, Penn.	1643208	375.2	7.2
	1644339	324.9	

Property	Detector	Exposure [(pCi/L) days]	Percent Deviation from Mean (for pair)
Irwin, Penn.	1436069	154.3	7.2
	1643193	178.4	
North Kingston, R.I.	1642331	76.8	4.8
	1642333	69.8	
Slatersville, R.I.	1643097	187.2	16.2
	1643098	259.7	
Slatersville, R.I.	1643084	246.8	1.8
	1643077	255.6	
Slatersville, R.I.	1645777	103.1	8.8
	1641185	86.4	
Manassas, Va.	1643681	108.8	18.4
	1643689	75.0	
Newport News, Va.	1647558	189.8	5.0
	1647561	209.7	
Woodbridge, Va.	1647566	123.7	5.0
	1643690	138.6	
Kent, Wash.	1645126	78.5	9.8
	1645139	64.5	
Kent, Wash.	1644016	66.3	7.3
	1644015	76.8	
Renton, Wash.	1645133	NR	
	1645103	NR	
Renton, Wash.	1644011	80.3	45.6
	1644014	30.0	
Renton, Wash.	1645121	59.3	9.3
	1645100	71.5	
Sun Prairie, Wisc.	1647585	222.3	5.0
	1643122	201.2	
Sun Prairie, Wisc.	1643121	265.3	12.5
	1644108	206.5	
Sun Prairie, Wisc.	1647011	434.3	14.6
	1643130	323.9	
Sun Prairie, Wisc.	1646986	431.1	5.4
	1647016	387.0	

Property	Detector	Exposure [(pCi/L) days]	Percent Deviation from Mean (for pair)
Sun Prairie, Wisc.	1646998	106.9	1.0
	1646995	104.8	
Sun Prairie, Wisc.	1643128	236.3	6.1
	1646987	267.1	
Sun Prairie, Wisc.	1643995	598.8	6.0
	1644025	530.7	
Sun Prairie, Wisc.	1643111	306.4	0.8
	1643110	311.6	

**<sup>a</sup>Summary:**

Average of the mean deviations:  $10.7 \pm 9.2\%$  (at two sigma level of confidence)

Maximum mean deviation: 45.6%

Minimum mean deviation: 0.0%

Number of replicate pairs in calculation: 56

Total number of replicate pairs deployed: 70

<sup>b</sup>NR, detector not returned for analysis.

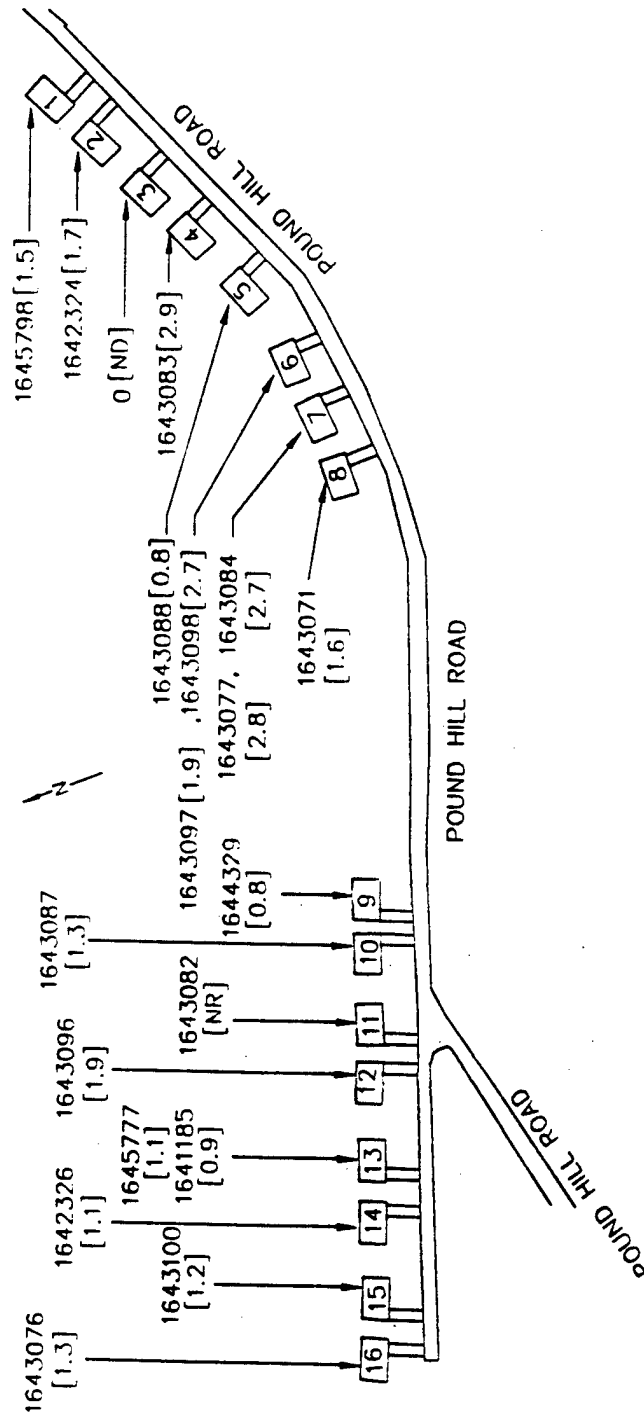
<sup>c</sup>Of this replicate pair, one detector was deployed for less than 90 days and the other for a different time period, thus invalidating a calculation of this type.



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**Slatersville Army Housing  
 North Smithfield, Rhode Island  
 Indoor Radon Concentrations**



**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

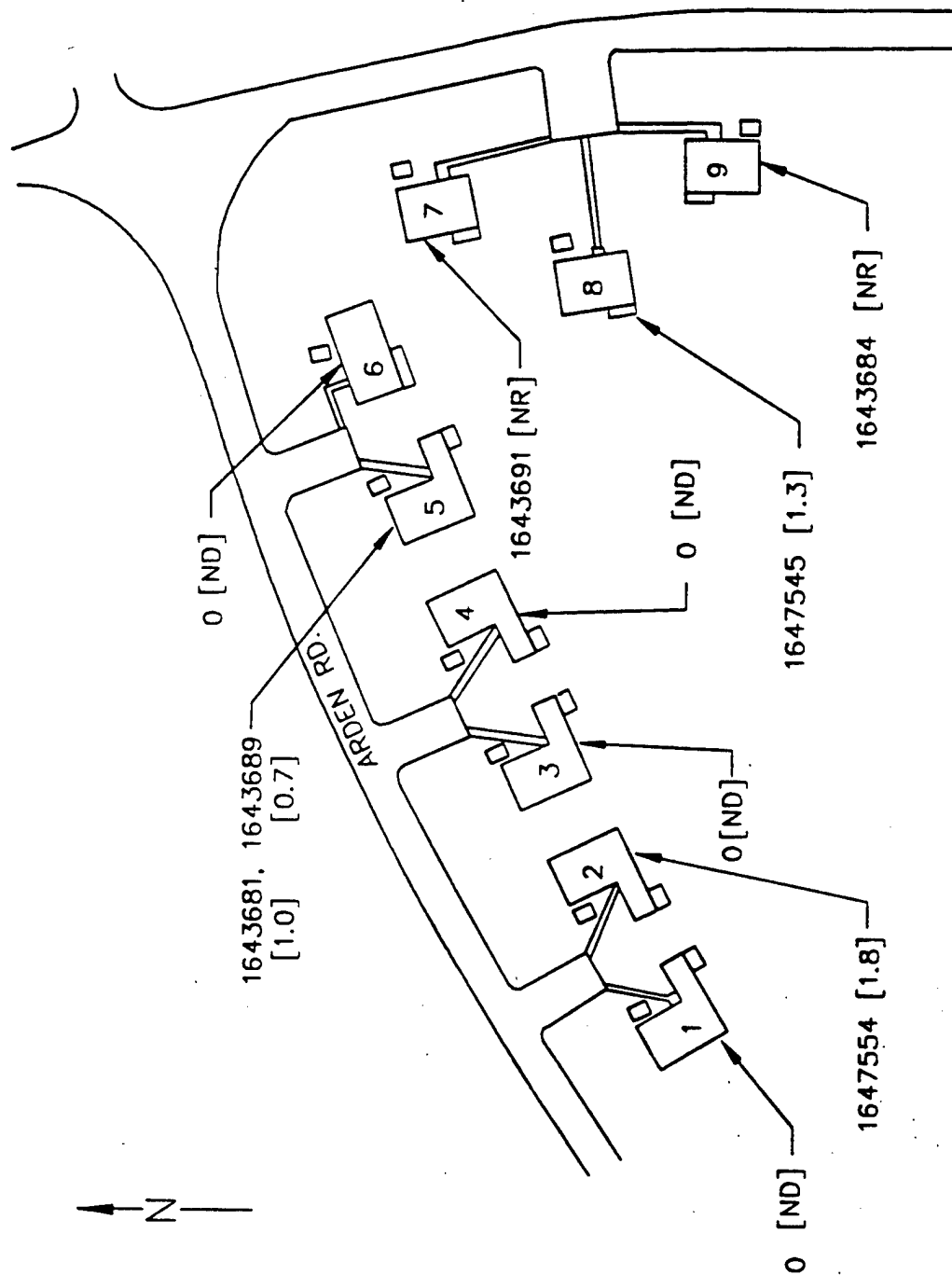
[NR] Detector Not Returned

[ND] No Data For This Location

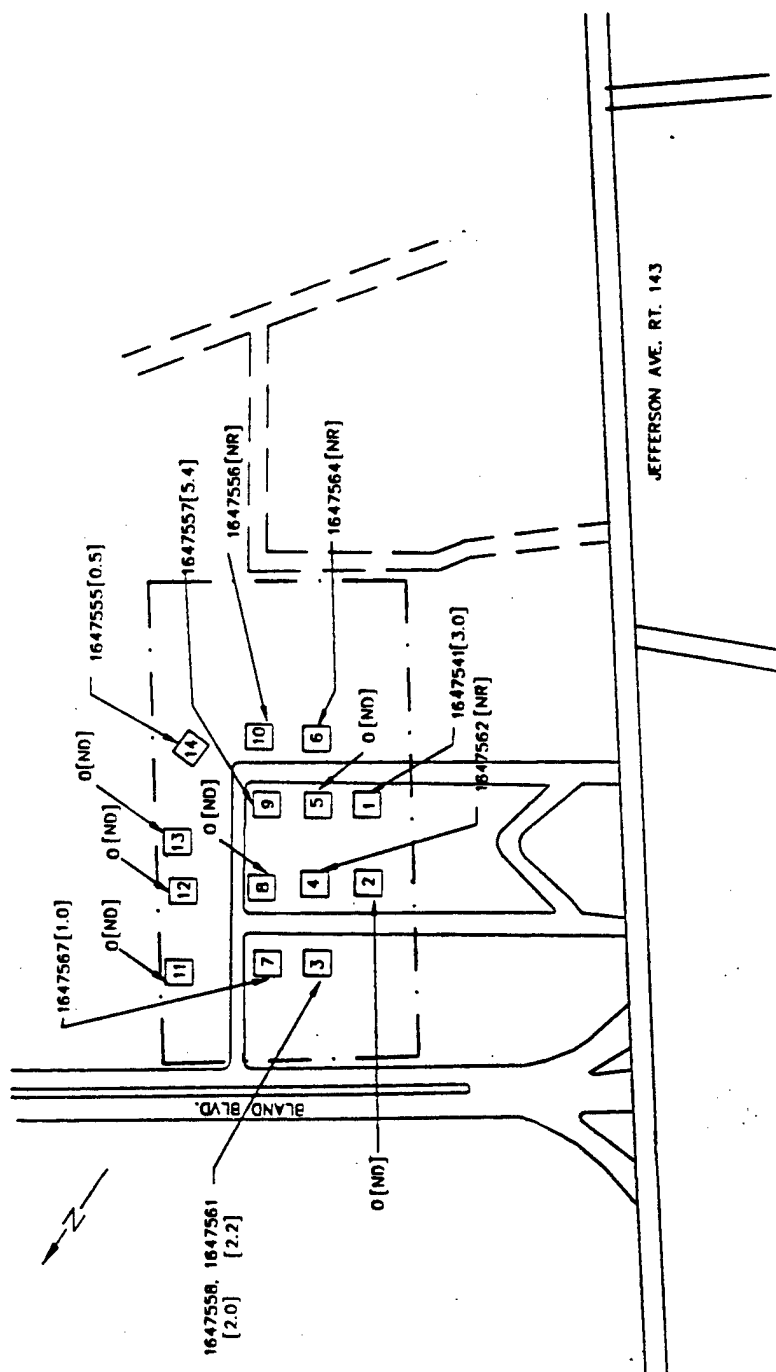
[ ] Field Replicate

( ) Unit or Apartment Number

# Manassas Army Housing Manassas, Virginia Indoor Radon Concentrations



# Patrick Henry Army Housing Newport News, Virginia Indoor Radon Concentrations



**KEY**

Seven-digit Number is Monitor Serial Number

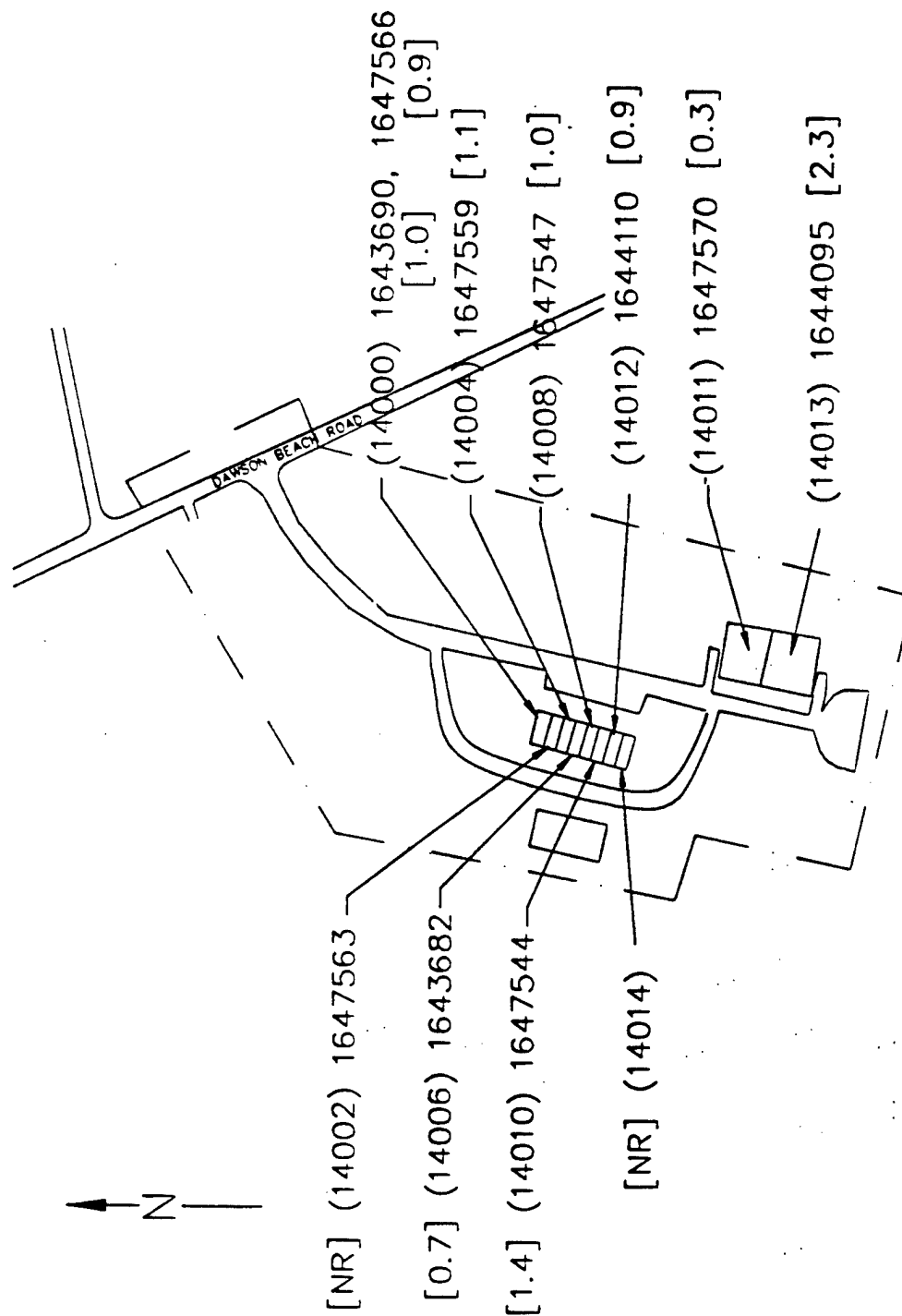
[ ] Radon Concentration in pCi/L

[NR] Detector Not Returned

[ND] No Data For This Location

[ ] [ ] Field Replicate

( ) Unit or Apartment Number

**Woodbridge Army Housing**  
**Woodbridge, Virginia**  
**Indoor Radon Concentrations**


**KEY**

Seven-digit Number is Monitor Serial Number

[ ] Radon Concentration in pCi/L

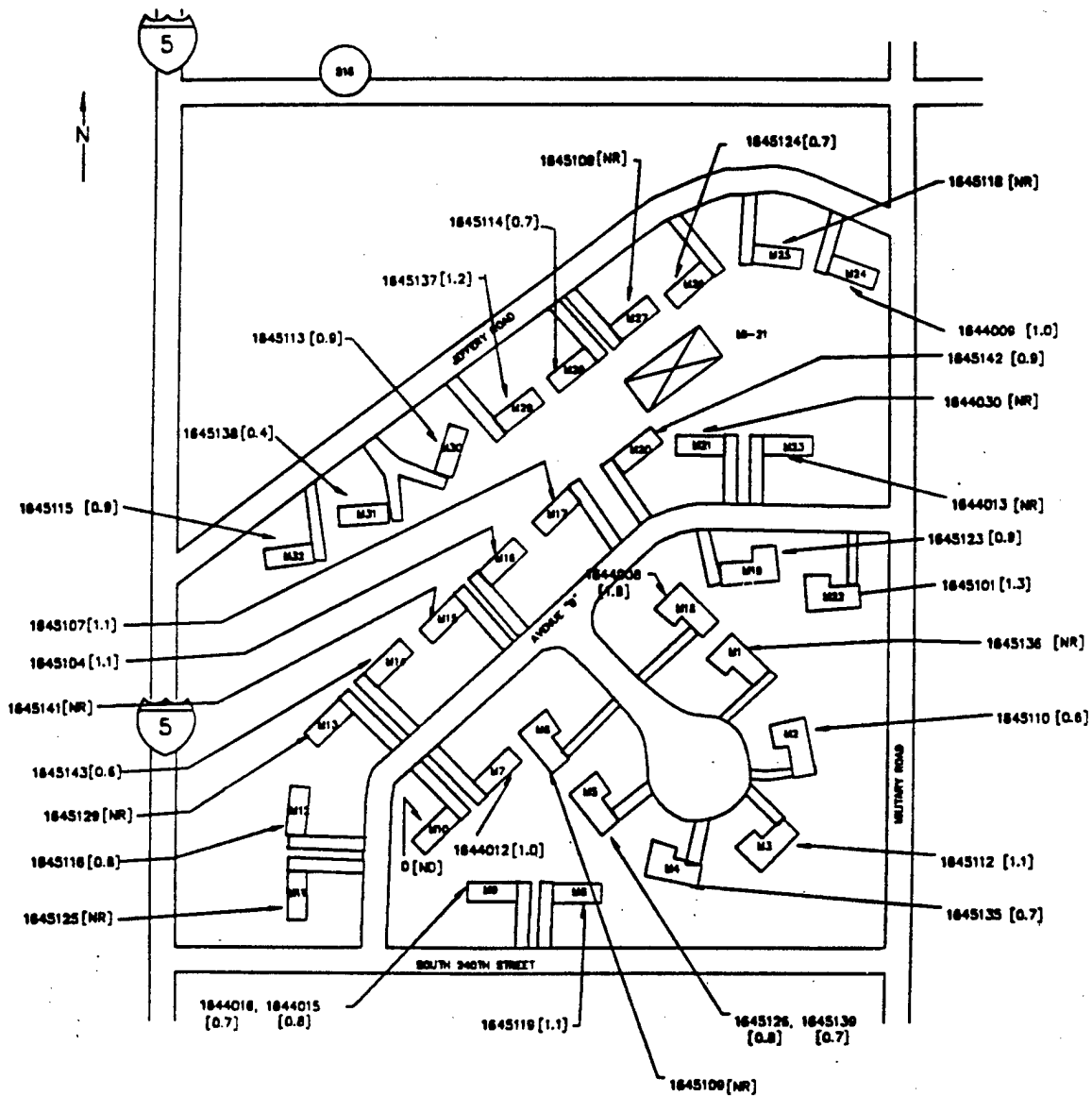
[NR] Detector Not Returned

[ND] No Data For This Location

[ ] Field Replicate

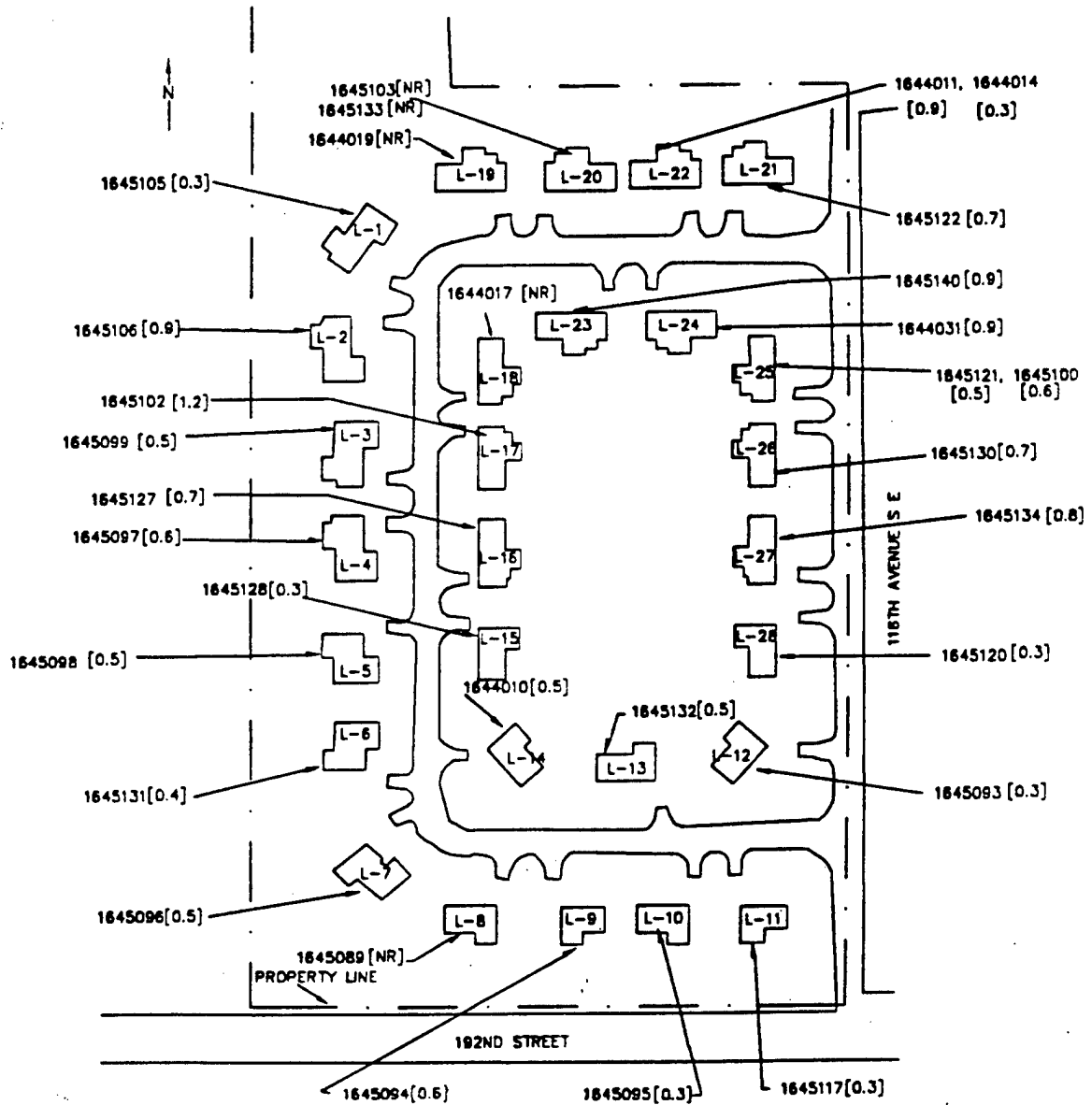
( ) Unit or Apartment Number

# Midway Army Housing Kent, Washington Indoor Radon Concentrations



# Youngs Lake Army Housing Renton, Washington Indoor Radon Concentrations

**KEY**  
 Seven-digit Number is Monitor Serial Number  
 [ ] Radon Concentration in pCi/L  
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 [ND] No Data For This Location  
 [ ] Field Replicate  
 ( ) Unit or Apartment Number



Sun Prairie Army Housing  
Sun Prairie, Wisconsin  
Indoor Radon Concentrations

1-53

**KEY**  
Seven-digit Number is Monitor Serial Number  
[ ] Radon Concentration in pCi/L  
[NR] Detector Not Returned  
[ND] No Data For This Location  
[ ] Field Duplicate  
( ) Unit or Apartment Number

